

Preliminary Assessment PA2

Solvents Recovery Service (SRS) 1200 Sylvan Street, Linden City Union County, New Jersey

NJD 002182897

SEPA	POTENTIAL HAZARDOUS WASTE SITE PRELIMINARY ASSESSMENT					
	PART 1 - SITE INFOR	MATION AND ASSESSA	MENT	LNI]	D002182	897
IL SITE NAME AND LOCATION						
1		02 STREET, ROUTE NO., O	A SPECIFIC LOCATION	DENTIFIER		
Solvents Recovery Serv	ice (SRS)	1200 Sylvan	Street			
]			06 COUNTY		07 COUNT	100 CO
Linden City		NJ 07036	Union		20	09
09 COORDINATES LATITUDE 40° 36' 49"	LONGITUDE 74° 15' 07"	Block: 580 Acreage: 10	Lots 21,	22 , 23 28 , 29	3, 24, 2	1 ~ -
10 DIRECTIONS TO SITE (Statump from nearbol guest (a	ed)	1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	21,	20, 29	, 	
From Trenton, Route 1 of Linden Airport).	north to Linden.	Turn right onto	o Sylvan St	reet (j	ust sou	th
III. RESPONSIBLE PARTIES			· · · · · · · · · · · · · · · · · · ·			
01 OWNER IS ARROW		02 STREET (Mismoss, Manny,	/ Ot-Contingly			
Carleton H. Boll		1200 Sylvan				
03 CTY		04 STATE 05 ZIP CODE	OG TELEPHONE	ишаға		
Linden City		NJ 07036	1	_		
O7 OPERATOR (# Mount and adjusted from owner)		00 STREET (Surfaces, many).	(201) 862	-2000	· · · · · · · · · · · · · · · · · · ·	
James R. Hulm	•	1200 811110	Charact			
09 CITY		1200 Sylvan	12 TELEPHONE	HILLIANS I		
Linden City		NJ 07036	i i	I		
13 TYPE OF OWNERSHIP (Crocs ene)		1.0 07030	(201) 862-	-2000		
🙇 A. PRIVATE 🗆 B. FEDERA	(Apone) name)	C. STAT	E DD.COUNTY	E. MUN	(ICIPA)	
I F. OTHER.	·	C G. UNKI				
THE MONTH AND THE PROPERTY OF THE ICA	(Streets)		~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~			
X A RCRA 3001 DATE RECEIVED: 7	13 82 D B UNCONTRO	OLI ED WASTE SITE				
IV. CHARACTERIZATION OF POTENTIA	M DAY YEAR	OLLED WASTE SITE (CERCIA 10	OATE RECEIVE	MONTH DAT	TEMA DC	. NONE
O ON SITE INSPECTION	BY (Chock at that apply)				· · · · · ·	
MYES DATE 4 1 86	□ A. EPA □ 8. E	EPA CONTRACTOR (SFICIAL D.F. OTHER: _	C. STATE	D. OTHER C	ONTRACTOR	
	CONTRACTOR NAME(S)	:	15	(Pecely)		
2 SITE STATUS (Crees ene)	Q3 YEARS OF OP					
A A ACTIVE DB. INACTIVE DC. L	SENT KNOWN OF ALL SOCI	BEGINNING YEAR ENDING	YEAR	UNKNOWN		
SRS receives halogenated wastes and miscellaneous	and unhalogenat	ed spent industi wastes.	ial solven	ts, ign	itable	-
At	tachment D·8-11		e.		·	•
5 DESCRIPTION OF POTENTIAL MAZARO TO ENVI	PONMENT AND/OR POPULATION					
Soil and groundwater cor	tamination have 1	noon done				
1 to d & 1	riacron nave l	ren aocumented	on site.	SPS had	hoo-	

cited for releasing contaminated effluent to the Linden Roselle Sewerage Authority and the surface water.

Attachments K; J:18, 19

V. PRIORITY ASSESSMENT 01 PRIORITY FOR INSPECTION (Chock one. I non or modern a chocked

A. HIGH						
(Disection on the sure of the	MEDIUM (Medical)	C. LOW Imapeci on ione averages (D. NONE	ACION needed. COMBINES CUITORS dispo	•	
VI. INFORMATION AVAILABLE FROM				TOTAL COMPANY CONTRACTOR	saen famu	
O1 CONTACT	. 02 0	F (Agency/Organia story				
Bob Patel	1				03 TELEPHONE NUMBER	
04 PERSON RESPONSIBLE FOR ASSESSMENT		DEP/DHWM/BI			(609) 292-9880	
David Van Eck	1-5.7	1	PGANIZATION	07 TELEPHONE NUMBER	08 DATE	
David Vall ECK	· NJ	DEP [HWM/BPA	6091984-3014	<u>88, 27, 6</u>	

ŞEPA

POTENTIAL HAZARDOUS WASTE SITE SITE INSPECTION REPORT PART 2 - WASTE INFORMATION

	I. IDENTIFICATION						
	01 STATE	02 SITE NUMBER					
ľ	NJ	D002182897					

~~			PART 2 - WAS	TE INFORMATIO	N	L NJ DOC	02182897
II. WASTE!	STATES, QUANTITIES, AN	D CHARACTEF	RISTICS				
01 PHYSICAL	STATES (Check all that apply:	02 WASTE QUANT	TITY AT SITE	03 WASTE CHARAC	CTERISTICS (Check all that a	DO(y)	
A SOLID			of waste quantities e independent)	IZ: A. TOXIC		JBLE KI. HIGHLY	
☐ B. POWD		TONS .		☐ B. CORR	OACTIVE A G. FLAM	MABLE CK. REACT	TIVE
□ D. OTHER	e	CUBIC YARDS		D. PERS	SISTENT & H. IGNITA		PATIBLE
	(Specify)	NO. OF DRUMS	2,376 Max.				Freiendes
III. WASTE	TYPE			- 			
CATEGORY	SUBSTANCE NA	AME	01 GROSS AMOUNT	02 UNIT OF MEASUR	RE 03 COMMENTS		
SLU	SLUDGE						
OLW	OILY WASTE		Unknown	Drums			·
SOL	SOLVENTS		90,000	Gallons	In storage	tanks	
PSD	PESTICIDES		Unknown	Drums		aining pesti	inides
occ	OTHER ORGANIC CHI	EMICALS		1	Waste com-	arming peoc.	CIGES
IOC	INORGANIC CHEMICA	ALS		†			
ACD	ACIDS				+		
BAS	BASES						
MES	HEAVY METALS		Unknown	Drums	Waste cont	aining metal	e
IV. HAZARD	OUS SUBSTANCES (See App	pendix for most frequent			THUOLD JULI	allillis inco-	.5
01 CATEGORY	02 SUBSTANCE NA		03 CAS NUMBER	04 STORAGE/DI	ISPOSAL METHOD	05 CONCENTRATION	06 MEASURE OF CONCENTRATION
SOL	Chlorobenzene		108907	In groundw	vater	70,000	
SOL	Methylene Chlor		75092	In groundw		1404	ppm
SOL	Trichloroethene	e	79016	In groundw		11000	
SOL	1,2-Dichloroeth	nene	107062	In groundw		151	ppm
SOL	Benzene		71432	In groundw		1316	ppm
SOL	2,3-benzofuran		271896	In groundw		18000	
SOL	1,1,2,2-tetrach			In groundw		18000	ppm
SOL	1,2,4-trichloro		120821	In groundw		287	DDm
SOL	Naphthalene		91203	In groundw		200	ppm
SOL	Tetrachloroethy	/lene	127184	In soil	acei	10800	ppm
SOL	Ethylbenzene		100414	In soil		1250	ppm
SOL	1,1,1-Trichloro	ethane	71556	In soil		941	ppm
SOL	Toluene		t	In soil		36700	ppm
OLW	Petroleum Hydro	carbons	†	In soil		14344	ppm
MES	Lead			In 55 Gallo	on Drums	14344	DDm
					<u> </u>		
V. FEEDSTO	CKS (See Appendix for CAS Numbers)			<u> </u>			<u> </u>
CATEGORY			02 CAS NUMBER	CATEGORY	2: SEEDSTO		
FDS		-	02 020 110		01 FEEDSTO	CK NAME	02 CAS NUMBER
FDS				FDS			
FDS				FDS	,		
FDS			·	FDS			
	OF INFORMATION (CO.		<u> </u>	FDS		<u> </u>	
71. 0001.020	S OF INFORMATION ICHO EDO	icfic references, e.g., s	ilate files, sample analysis, re	iports)	·		
NJDEP/	DHWM Metro Regio	on Enforc	ement Files	ı			
NJDEP/	DWR Metro Region	n Enforce	ment Files	÷ .			

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POTENTIAL HAZARDOUS WASTE SITE SITE INSPECTION REPORT

I. IDENTIFICATION

01 STATE 02 SITE NUMBER

PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS	D002182897
II. HAZARDOUS CONDITIONS AND INCIDENTS	
01 X A. GROUNDWATER CONTAMINATION 02 X OBSERVED (DATE: 5/19/83) = POTENTIAL 03 POPULATION POTENTIALLY AFFECTED: 04 NARRATIVE DESCRIPTION	☐ ALLEGED
SRS has severe groundwater contamination.	
Attachments J-8, 9, 29; G; K	
01 \$\top 8\$. SURFACE WATER CONTAMINATION 02 \$\top 02\$ OBSERVED (DATE. \$\frac{10}{181}\$) \$\top 03\$ POPULATION POTENTIALLY AFFECTED: 04 NARRATIVE DESCRIPTION	☐ ALLEGED
Fighting a fire on October 1, 1981, large amounts of runoff carried continto Kings Creek (Attachment M). Currently, runoff is contained and continuous contained and contained and continuous contained and continuous contained and continuous contained and contained an	diverted to
an onsite waste handling facility which discharges to Linden Roselle S Authority. (Attachment H:1-5, 14)	Sewerage
01 & C. CONTAMINATION OF AIR 02 SOBSERVED (DATE: 10/1/81) — POTENTIAL 03 POPULATION POTENTIALLY AFFECTED: 04 NARRATIVE DESCRIPTION	
Local residents complained of odors when distillation column released acetamide. (Attachment I). Air sampling during the fire on $10/1/81$ of	dimethyl
50 ppm toluene and other solvents.	refected
Attachment M-9 01 X D. FIRE EXPLOSIVE CONDITIONS 02 X OBSERVED (DATE 10/1/81) POTENTIAL	
03 POPULATION POTENTIALLY AFFECTED: 04 NARRATIVE DESCRIPTION	_ /
The finished product tank farm was involved in a fire and explosion or 1981 (Attachment M). Due to the flammable and explosive nature of mat	october 1,
handled at SRS, the potential exists for additional fires or explosion	is.
01 ☐ E. DIRECT CONTACT 02 ☐ OBSERVED (DATE:) ☐ POTENTIAL 03 POPULATION POTENTIALLY AFFECTED:	☐ ALLEGED
The site is surrounded by a chain link fence and has a 24 hour guard.	
· · · · · · · · · · · · · · · · · · ·	·
01 X F. CONTAMINATION OF SOIL 03 AREA POTENTIALLY AFFECTED: (Acres) 02 X OBSERVED (DATE: 12/22/83) T POTENTIAL 04 NARRATIVE DESCRIPTION	□ ALLEGED
SRS has several areas of contaminated soil. Some areas have had soil	removal.
Attachments J:6-12, 33; G; K; N	
01 & G. DRINKING WATER CONTAMINATION 02 COBSERVED (DATE:) POTENTIAL 03 POPULATION POTENTIALLY AFFECTED: 04 NARRATIVE DESCRIPTION	□ ALLEGED
The nearest potable well is approximately 2.3 miles west of the site the potential for drinking water contamination. Maps 7 & 9	, offering
01 M. H. WORKER EXPOSURE/INJURY 02 MOBSERVED (DATE: 10/1/81) POTENTIAL	☐ ALLEGED
Workers may be exposed to hazardous materials through spills and through	•
volatile organic vapors. Two minor injuries were reported as a result	of the fire
on 10/1/81. Attachment M:7	
01 XI. POPULATION EXPOSURE/INJURY 02 X OBSERVED (DATE: 2/2/86) © POTENTIAL 03 POPULATION POTENTIALLY AFFECTED: 04 NARRATIVE DESCRIPTION	□ ALLEGED
Local residents complained of fishy/amine type odors emanating from SR	s.
Attachment I	

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POTENTIAL HAZARDOUS WASTE SITE SITE INSPECTION REPORT

I. IDENTIFICATION

01 STATE 02 SITE NUMBER

	ZARDOUS CONDITIONS AND INCIDENTS	NJ D002182897
II. HAZARDOUS CONDITIONS AND INCIDENTS (Continued)		
01 □ J. DAMAGE TO FLORA 04 NARRATIVE DESCRIPTION	02 © OBSERVED (DATE:) □ PO	OTENTIAL _ ALLEGED
There has been no reported damage to	o flora.	
01 X K. DAMAGE TO FAUNA 04 NARRATIVE DESCRIPTION (Include name(s) of species;		DTENTIAL ALLEGED
There may have been damage to fauna	associated with the fire fight	ing runoff to
Kings Creek on 10/1/81.		
01 T L. CONTAMINATION OF FOOD CHAIN 04 NARRATIVE DESCRIPTION	02 🗆 OBSERVED (DATE:) 🗇 PC	OTENTIAL ALLEGED
There has been no reported contamin	ation of food chain.	
01 X M. UNSTABLE CONTAINMENT OF WASTES (Spitts Runoff Standing liquids . Leaking drums	02 X OBSERVED (DATE: 4/17/79) = PO	OTENTIAL _ ALLEGED
03 POPULATION POTENTIALLY AFFECTED:	04 NARRATIVE DESCRIPTION	tions arealised and
leaking. Chemical lagoons had no la	ining. (Attachments J-6,7; N;M	
much to establish adequate containme	ent.	
01 基 N. DAMAGE TO OFFSITE PROPERTY 04 NARRATIVE DESCRIPTION	02 _ OBSERVED (DATE:) X PC	OTENTIAL _ ALLEGED
In the past, releases of contaminants		
offsite property. Currently runoff	•	e handling facility
Contaminated groundwater may migrate of \$\infty\$ O. CONTAMINATION OF SEWERS, STORM DRAINS, WWTPs		
04 NARRATIVE DESCRIPTION		DTENTIAL ALLEGED
SRS has been cited several times by of ordinance limitations.	Linden-Roselle Sewerage Author	ity for violation
	chments J:4,18-24	
01 X P ILLEGAL/UNAUTHORIZED DUMPING 04 NARRATIVE DESCRIPTION	02 SOBSERVED (DATE: 7/24/74) = PC	OTENTIAL _ ALLEGED
No permit was found for chemical lag	goon which received spillage fr	om solvent
recovery/fuel blending area.		
	chment N	
05 DESCRIPTION OF ANY OTHER KNOWN, POTENTIAL, OR ALLEG	GED HAZARDS	
	·	·
III TOTAL BORIE ATION BOTCHTIALLY APPROVED		
III. TOTAL POPULATION POTENTIALLY AFFECTED:	· ·	
NJDEP/DHWM/DWR/DEQ Metro Region File NJDEP/DHWM/BHWE Files	25	
NJDEP/DHWM/BPA Files		
V. SOURCES OF INFORMATION (Cité specific references, e.g., state line; si	ambie analysis raports ,	
		•

≎EPA	POTENTIA PART 4 - PERMIT	I. IDENTIFICATION 01 STATE 02 SITE NUMBER NJ D002182897			
II. PERMIT INFORMATION			THE THE PROPERTY OF THE PARTY O		
01 TYPE OF PERMIT ISSUED	02 PERMIT NUMBER	03 DATE ISSUED	04 EXPIRATION DATE	05 COMMENTS	
(Check all that apply)					
☐ A. NPDES					
□ B, UIC					
¥C. AIR ID# 40097	93		1992	See Att	achment I
SED. RCRA	2009C	12/29/87	10/31/89		
□ E. RCRA INTERIM STATUS					
☐ F. SPCC PLAN				1	
■G. STATE (Specify)NJPDES-SIU	NJ0002224	12/29/87	10/31/89	<u> </u>	
☐ H. LOCAL (Soecity)				 	
☐ I. OTHER (Soechy)		<u> </u>		 	· · · · · · · · · · · · · · · · · · ·
□ J. NONE					
III. SITE DESCRIPTION			<u> </u>	1	
	3 Basi 250 Drum 49 Tank	S	INCENERATION UNDERGROUND INJE CHEMICAL/PHYSICA BIOLOGICAL WASTE OIL PROCES. SOLVENT RECOVER: OTHER RECYCLING/ OTHER Soe	SING Y	2 A. BUILDINGS ON SITE 06 AREA OF SITE 10 Acre
V. CONTAINMENT 1 CONTAINMENT OF WASTES (Check one)					
A. ADEQUATE, SECURE	B. MODERATE	C C. INADEQL	JATE, POOR	D. INSECU	JRE, UNSOUND, DANGEROUS
DESCRIPTION OF DRUMS, DIKING, UNERS, BAF SRS had an unlined lago Administrative Order of containment, but drums cracked diking.	on. Contamina June 1982. F	ormer drum	storage ar	ea had no	o secondary

01 WASTE EASILY ACCESSIBLE: YES NO 02 COMMENTS

Site is surrounded by a chain link fence and workers are present 24 hours a day.

VI. SOURCES OF INFORMATION (Cite apecific references, e.g. state files, sample analysis, reports)

NJDEP/DHWM/DWR/DEQ - Metro Region Files NJDEP/DWR - Central Files NJDEP/DHWM - BHWE Files

			DOTI	CHITIAL MATA	22211231			LIDI	ENTIFICATION	
O.F	POTENTIAL HAZARDOUS WASTE SITE SITE INSPECTION REPORT						01 STATE 02 STE NUMBER			
\/L		SITE INSPECTION REPORT PART 5 - WATER, DEMOGRAPHIC, AND ENVIRONMENTAL DATA			MENTAL DATA	ŊJ	D00218289	97		
# OBIN			FARTU- WATER	I, DEMOGRAF	IIC, AND E	NVINUNI	MENIAL DATA			<u></u>
II. UNIN	KING WATER SU	PPLY			1					
	OF DRINKING SUPPLY ts applicable)			02 STATUS				03	DISTANCE TO SITE	
		SURFACE	WELL	ENDANGER	ED AFF	ECTED	MONITORED	·		
COMMU		A. 🔀	B. 🖺	A. 🗆		3. 🗆	C. 🗆	A .	(mi)	
NON-CO	MMUNITY	Ç. 🗆	D. 🖸	D. 🗆	E	:. -	F. 🖸	₿.	(mi)	
	UNDWATER						<u>-</u>			
01 GROUN	NOWATER USE IN VICI	INITY (Check o	one)	·.						
□ A. C	ONLY SOURCE FOR DI	RINKING	B. DRINKING 10ther sources evened. COMMERCIAL, INC (No other water source	DUSTRIAL IRRIGATIO	(1	COMMERCIAL Limited other sol	L, INDUSTRIAL, IRRIGAT urces evallable)	'ION [D. NOT USED, UNUSE	ABLE
02 POPUL	02 POPULATION SERVED BY GROUND WATER 26000 03 DISTANCE TO NEAREST DRINKING WATER WELL 2 (mil)									
04 DEPTH	TO GROUNDWATER		05 DIRECTION OF GROU	UNDWATER FLOW	06 DEPTH T		07 POTENTIAL YIEL	n	08 SOLE SOURCE AGE	HEED
	5-13 (ft		East by Sou	uthaset	0F CON0	7	OF AQUIFER	 		
20 0550011	(<u> </u>	16 MGD	(ppd)	T YES 🗶	NO
D optio	TICHON DO	uding useage. o	depth, and location relative to po	opulation and buildings)						
Rahway Water Department maintains potable wells approximately 2 miles west of SRS. Elizabethtown Water Company's wells are approximately 2.5 miles north of the site.										
10 RECHAR	GE AREA				11 DISCHAR	GF AREA				
□ YES	Surface water flows to Kings Creek, part of the Arthur									
IV. SURFA	V. SURFACE WATER Kill drainage basin.									
🕱 A. RE	ST SURFACE WATER USE (Check one) ### A. RESERVOIR, RECREATION									
02 AFFECTE	ED/POTENTIALLY AFF	ECTED BOD	DIES OF WATER	· · · · · · · · · · · · · · · · · · ·						
NAME:										
			•				AFFECTED		DISTANCE TO SITE	
	g's Creek					:	X		0.4	4-mil
	vay River								0.9	(mi)
Altı	nur Kill							_	3	(mi) (mi)
V. DEMOG	RAPHIC AND PR	OPERTY	INFORMATION							(11.11)
	OPULATION WITHIN					102	CICTANICE TO MEAGE			
	MILE OF SITE	TWO	1014 TO OF OFF				DISTANCE TO NEARES	T POPUL	ATION	
	3000 .	8	(2) MILES OF SITE 30000	THREE (3)) MILES OF S	ITE		2 2	-	
NO.	OF PERSONS		NO. OF PERSONS	U	D. OF PERSONS	-		0.2	5(mi)	
3 NUMBER C	OF BUILDINGS WITHIN	1 TWO (2) MI	ILES OF SITE		04 DISTANCE	TO NEARES	ST OFF-SITE BUILDING			
	1	10000		.]						
							0.05	(mi	i)	
5 POPULATIO	ON WITHIN VICINITY O	OF SITE (Prov	vide narrative description of nati	ure of population within vic	cmity of site, e.g.,	, rurai, village, di	ensely populated urban area)			
The si	te is loca	ited in	n a highly i	ndustriali	ized are	- Э Т1	he noaroat	ma a d .	d	
ıs app Linden	roximately lie appro	v 0.25 ximate	miles to the ely 0.75 miles. The small	e northwes	st. Oth	her ma	75 milaa +	ion (centers of	
l mile	east of S	RS.				- G OI 1	rremited ite:	s app	roximately	į

POTENTIAL HAZARDOUS WASTE SITE

I. IDENTIFICATION

SEPA		ECTION REPORT PHIC, AND ENVIRONMENTAL DATA	01 STATE 02 SITE NUMBER NJ D002182897
VI. ENVIRONMENTAL INFORMA			
01 PERMEABILITY OF UNSATURATED 2	ZONE (Check one)		
□ A. 10~6 — 10~	-6 cm/sec □ B. 10-4 - 10-6 cm/sec	翼 C. 10 ⁻⁴ − 10 ⁻³ cm/sec □ D. GREATER	THAN 10 ⁻³ cm/sec
02 PERMEABILITY OF BEDROCK (Check			
☐ A. IMPERN (Less than	MEABLE & B. RELATIVELY IMPERMEA		VERY PERMEABLE (Greater than 10 ⁻² cm-sec)
03 DEPTH TO BEDROCK	04 DEPTH OF CONTAMINATED SOIL ZONE	05 SOIL pH	
<u>20-27 (ft)</u>	3(ft)		
06 NET PRECIPITATION 12 (in)	2 . 75 (in)	08 SLOPE SITE SLOPE DIRECTION OF SITE SI	0 1
09 FLOOD PCTENTIAL	110	Southeast	
SITE IS IN 500+ YEAR FLO	☐ SITE IS ON BAR	RIER ISLAND. COASTAL HIGH HAZARD AREA.	RIVERINE FLOODWAY
11 DISTANCE TO WETLANDS (5 acre minim	num)	12 DISTANCE TO CRITICAL HABITAT (of encangered	1 species)
ESTUARINE	OTHER		(mi)
A5(mi)	B(mi)	ENDANGERED SPECIES: None	2
13 LAND USE IN VICINITY			
DISTANCE TO: CCMMERCIAL INDUSTRI A0 (mi)	в0.25	IFE RESERVES PRIME AG LAN	CULTURAL LANDS D AG LAND _(mi) D(mi)
14 DESCRIPTION OF SITE IN RELATION T	TO SURROUNDING TOPOGRAPHY		
two railroad spurs Most of the rain we east section of the Site is underlain 15 to 25 feet of we represent the section of the	s and U.S. Route 1, liewater runoff is contained the property, an area laby approximately 3 feedunconsolidated and unsa	sloping less than 1%. The swithin the 22 and 24 for ed in basins onsite. Runcking industry, flows into the of fill. Under this litratified clay, silt, sand is the Triassaic Brunswidstones.	not contour interval. noff from the south- to Kings Creek. les approximately nd and gravel of
		·	
•			
		•	
	·		•
·			
•			
II. SOURCES OF INFORMATION	(Cite specific references, e.g., state files, sample analysis	i, reportsi	
NJDEP/DHWM - Metro NJDEP/DWR - Centra			

\$EP		POTENTIAL HAZARDOUS WASTE SITE SITE INSPECTION REPORT PART 6 - SAMPLE AND FIELD INFORMATION		I. IDENTIFICATION O1 STATE 02 SITE NUMBER NJ D002182897	
II. SAMPLES TAN	EN				
SAMPLE TYPE		01 NUMBER OF SAMPLES TAKEN	02 SAMPLES SENT TO		03 ESTIMATED DATE RESULTS AVAILABLE
GROUNDWATER	l	eight (8)	ERM-Northeast		11/22/83
SURFACE WATE	R	two (2)	Unknown (Attachment M-4)		10/6/81
WASTE					. ,
AIR		Unknown	Ecology and Environment, Inc.		10/14/81
RUNOFF		one (1)	Unknown (Attachment M-4)		10/6/81
SPILL					
SOIL		fourteen ((14) ERM-Northeast		8/84
VEGETATION					
	<u>farm</u>	one (1)	Unknown (Attachment M-4)		10/6/81
III. FIELD MEASUR					
on TYPE HNu ar		02 COMMENTS			
Photovac T	[P	During sit	e visits of $5/1/84$ and $5/2/86$, ambi	ient air wa	as
photo-ioniz	zation	monitored.	On 5/1/84 the HNu would occasiona	ally peak (off scale.
detectors	<u> </u>	General on	site readings were 6.0 ppm. On 5/	[/] 2/86 , ambi	lent
	 	readings r	eached 100 ppm between the fuel ble	ending and	recovery
IV DIAGON		units.			
IV. PHOTOGRAPH					
01 TYPE C GROUN			02 IN CUSTODY OF USGS NJGS (Name o' organization or individual)		
03 MAPS SAYES	04 LOCATION				· · · · · · · · · · · · · · · · · · ·
I NO	<u> </u>	s, SRS, NJD	EP/DHWM/BHWE		

VI. SOURCES OF INFORMATION (Cité specific reférences e.g., state files, semple energies, réporta)

NJDEP/DHWM/DWR/DEQ Metro Region Files NJDEP/DHWM/BPA Files

V. OTHER FIELD DATA COLLECTED (Provide nerrative description)

NJ	02 D+B NUMBER 04 SIC CODE 07 ZIP CODE 07 036 02 D+B NUMBER 04 SIC CODE 07 ZIP CODE	PARENT COMPANY .# applicacies 08 NAME 10 STREET ADDRESS (P.O. Box. RFD #. etc.) 12 CITY 08 NAME 10 STREET ADDRESS (P.O. Box. RFD #. etc.) 12 CITY 08 NAME		09 D+B NUMBER 11 SIC CODE 14 ZIP CODE 11 SIC CODE 11 SIC CODE
O6 STATE	04 SIC CODE 07 ZIP CODE 07 03 6 02 D+B NUMBER 04 SIC CODE 07 ZIP CODE	10 STREET ADDRESS (P.O. 802, RFD # etc.) 12 CITY 08 NAME 10 STREET ADDRESS (P.O. 802, RFD #, etc.)		11 SIC CODE 14 ZIP CODE 09 D+B NUMBER 11 SIC CODE
NJ	07 ZIP CODE 07036 02 D+8 NUMBER 04 SIC CODE 07 ZIP CODE	12 CITY 08 NAME 10 STREET ADDRESS (P.O. Box. RFD #, etc.)		09 D+B NUMBER
NJ	07036 02 D+B NUMBER 04 SIC CODE 07 ZIP CODE	10 STREET ADDRESS (P.O. Box. RFD #, etc.)		09 D+8 NUMBER
06 STATE	02 D+B NUMBER 04 SIC CODE 07 ZIP CODE 02 D+B NUMBER	10 STREET ADDRESS (P O. Box. RFD #. etc.)	13 STATE	11 SIC CODE
	04 SIC CODE 07 ZIP CODE 02 D+B NUMBER	10 STREET ADDRESS (P O. Box. RFD #. etc.)	13 STATE	11 SIC CODE
	07 ZIP CODE 02 D+B NUMBER	12 CITY	13 STATE	
	02 D+B NUMBER		13 STATE	14 ZIP CODE
O6 STATE		08 NAME		
O6 STATE		US NAME		
06 STATE	DA SIC CODE			09 D+8 NUMBER
06 STATE	U4 SIC CODE	10 STREET ADDRESS (P O. Box, RFD +, etc.)		1 1 SIC CODE
1.	07 ZIP CODE	12 CITY	13 STATE	14 ZIP CODE
	02 D+8 NUMBER	08 NAME		090+8 NUMBER
	04 SIC CODE	10 STREET ADDRESS (P.O. Box. RFD #. etc.)	<u> </u>	1 1 SIC CODE
06 STATE	07 ZIP CODE	12 CITY	13 STATE	14 ZIP CODE
·		IV. REALTY OWNER(S)		<u> </u>
NAME		01 NAME	02 D+B NUMBER	
STREET ADDRESS .P O. Box, RFD #, etc.)		03 STREET ADDRESS (P.O. Box, RFD #, etc.)		04 SIC CODE
OBSTATE	07 ZIP CODE	1200 Sylvan Street		
	U. E., 000E			07 ZIP CODE
- 1	02 D+B NUMBER		NJ	07036
		i i		02 D+B NUMBER
······································	04 SIC CODE		•	04 SIC CODE
				I SIC CODE
OS STATE	O7 ZIP CODE	05 CITY	06 STATE	07 ZIP CODE
- 1	02 D+B NUMBER	O1 NAME		02.0 + 8 + 4 + 4055
- 1		- · · · · · -		02 D+B NUMBER
	04 SIC CODE		g co.	Tay are asset
	j	, and a second s		04 SIC CODE
6STATE	07 ZIP CODE	05 CITY	IOR STATE	07.7/9.0005
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	a state tide committee			
ererences. e.	y., state mes, sample analysis	. /eports)		
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r				
	OBSTATE OF STATE OF S	04 SIC CODE 02 D+B NUMBER 04 SIC CODE 00 STATE 07 ZIP CODE 02 D+B NUMBER 04 SIC CODE	04 SIC CODE 10 STREET ADDRESS, P.O. Box. RFD e. etc.) 12 CITY 12 CITY 13 CASIC CODE 14 CITY 15 CASIC CODE 15 CASIC CODE 16 STATE OF ZIP CODE 17 CASIC CODE 18 STREET ADDRESS, P.O. Box. RFD e. etc.) 18 STATE OF ZIP CODE 19 CASIC CODE 10 STREET ADDRESS, P.O. Box. RFD e. etc.) 10 STREET ADDRESS, P.O. Box. RFD e. etc.) 10 STREET ADDRESS, P.O. Box. RFD e. etc.) 10 STATE OF ZIP CODE 10 STREET ADDRESS, P.O. Box. RFD e. etc.) 10 STATE OF ZIP CODE 11 CODE 12 CITY 12 CITY 13 CITY 14 CITY 15 CITY 16 STATE OF ZIP CODE 16 STATE OF ZIP CODE 17 CITY 18 STATE OF ZIP CODE 18 STATE OF ZIP CODE 18 STATE OF ZIP CODE 19 CITY 10 STREET ADDRESS, P.O. Box. RFD e. etc.)	02 D+8 NUMBER 08 NAME 10 STREET ADDRESS.P 0. 801. AFD 0. 81C.] 13 STATE 17 ZIP CODE 12 CITY 13 STATE 17 ZIP CODE 12 CITY 13 STATE 19 STREET ADDRESS.P.O. 801. AFD 0. 81C.] 12 OO SY IV AN STREET ADDRESS.P.O. 801. AFD 0. 81C.] 12 OO SY IV AN STREET 12 OO SY IV AN STREET 12 OO SY IV AN STREET 13 STATE 15 CODE 15 CITY 15

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POTENTIAL HAZARDOUS WASTE SITE SITE INSPECTION REPORT

	DENTIFICATION					
01 STATE	02 SITE NUMBER					
N.T	02 SITE NUMBER D002182897					

	PART 8 - OPERA			RATOR INFORMATION NJ D002182		
II. CURRENT OPERATOR (Provide if different from owner)			OPERATOR'S PARENT COMPANY (# applicable)			
01 NAME 02 D+8 NUMB		02 D+8 NUMBER	10 NAME		11 D+B NUMBER	
Solvents Red	covery Servi	.ce				
03 STREET ADDRESS (P.O.	Box. RFD ≠, etc.)		04 SIC CODE	12 STREET ADDRESS (P.O. Box, RFD #, etc.)		13 SIC CODE
1200 Sylvan	Street					
DS CITY		06 STATE	07 ZIP CODE	14 CITY	15 STATE	16 ZIP CODE
Linden		NJ	07036			
8 YEARS OF OPERATION			· · · · · · · · · · · · · · · · · · ·		L	
1944-Present	-	`				
II. PREVIOUS OPERA	TOR(S) (Let most recent)	lirat: orovide o	Phy II different Irom owner!	PREVIOUS OPERATORS' PARENT		
1 NAME			102 D+B NUMBER	10 NAME	I COMPANIES (#	11 D+B NUMBER
				TO MANUE		T D T B NUMBER
3 STREET ADDRESS (P.O.	Box, RFD #, etc.)		104 SIC CODE	12 STREET ADDRESS (P.O. Box. RFD #, etc.)	·	112 616 6005
•				TE STITLE I RUDITESS (P.U. BOX, RPU F. SIC.)		13 SIC CODE
5 CITY		06 STATE	07 ZIP CODE	14 CITY	16 CTATE	16 ZIP CODE
				1.55	ISSIAIE	16 ZIP CODE
B YEARS OF OPERATION	09 NAME OF OWNER	DURING TH	S PERIOD			
1 NAME			100 0 1 0 11111050			
· ITAME			02 D+B NUMBER	10 NAME		11 D+B NUMBER
STREET ADDRESS (P.O. B			la sua casa		•	
STREET ADDRESS (P.O. B	oz. HPU F. etc.;		04 SIC CODE	12 STREET ADDRESS (P.O. Box, RFD #. etc.)		13 SIC CODE
000						
CITY		06 STATE	07 ZIP CODE	14 CITY	15 STATE	16 ZIP CODE
	·					
YEARS OF OPERATION	09 NAME OF OWNER	DURING TH	SPERIOD			<u> </u>
				İ		
NAME			02 D+8 NUMBER	10 NAME		11 D+B NUMBER
					İ	
STREET ADDRESS (P.O. BO	ox, RFD # . etc.;		04 SIC CODE	. 12 STREET ADDRESS (P.O. Box. RFD #, etc.)		13 SIC CODE
				·		
CITY		06 STATE	07 ZIP CODE	14 CITY	15 STATE	16 ZIP CODE
				·		
YEARS OF OPERATION	09 NAME OF OWNER	DURING THE	S PERIOD			
	· ·			·		
. SOURCES OF INFO	RMATION /Cre	references			·	
	TOTAL SPECIAL	. rererences, 8	.g., state lies, sample analysis	s, reports)		
NJDEP Files	•			•		
•					•	

O FDA	POTENTIAL HAZARDOUS WASTE SITE			I. IDENTIFICATION		
\$EPA		SITE INSP	INSPECTION REPORT TOR/TRANSPORTER INFORMATION O1 STATE 02 SITE NUMBER NJ D00218289			
II. ON-SITE GENERATOR	FANI	9-GENERA I UNI	FRANSPORTER INFORMATION	[_T10	DUUZIOZUJI	
01 NAME	<u> </u>	02 D+B NUMBER		A-19		
Solvents Recovery Se	rvice					
03 STREET ADDRESS (P.O. Box, RFD €, etc.)		04 SIC CODE	·			
1200 Sylvan Street		1				
05 CITY		07 ZIP CODE				
Linden	NJ	07036				
III. OFF-SITE GENERATOR(S)						
Numerous		02 D+8 NUMBER	01 NAME		02 D+B NUMBER	
03 STREET ADDRESS (P.O. Box, RFD #, etc.)	·	04 SIC CODE	O2 STREET ADOPTOR IN C. C.			
		1	03 STREET ADDRESS (P.O. Box, RFD #, etc.)		04 SIC CODE	
05 CITY	08 STATE	07 ZIP CODE	05 CITY	IOR STATE	07 ZIP CODE	
	_	ļ			OV TIN CODE	
01 NAME		02 D+8 NUMBER	01 NAME		02 D+8 NUMBER	
03 STREET ADDRESS (P.O. Box, RFD #, etc.)		04 SIC CODE	03 STREET ADDRESS (P.O. Box, RFD #, etc.)		04 SIC CODE	
05 CITY	LOG CTATE			ř	·	
ug Cirr	UOSIAIE	07 ZIP CODE	05 CITY	06 STATE	07 ZIP CODE	
IV. TRANSPORTER(S)						
01 NAME		02 D+B NUMBER	01 NAME			
Numerous		OLD TOMOLA	UT NAME		02 D+8 NUMBER	
D3 STREET ADDRESS (P.O. Box, RFD #, etc.)		04 SIC CODE	03 STREET ADDRESS (P.O. Box, RFD ≠, etc.)		las sic cons	
					04 SIC CODE	
05 CITY	06 STATE	07 ZIP CODE	05 CITY	06 STATE	07 ZIP CODE	
DI NAME		02 D+B NUMBER	01 NAME		02 D+3 NUMBER	
03 STREET ADDRESS (P.O. Box, RFD #, etc.)			·	· /		
O STREET ADDRESS (P.O. Box, RFD #, etc.)		04 SIC CODE	03 STREET ADDRESS (P.O. Box. RFD #. etc.)		04 SIC CODE	
5 CITY	IOS STATEL	07 ZIP CODE				
	OUSTATE	07 ZIP CODE	05 CITY	06 STATE	07 ZIP CODE	
V. SOURCES OF INFORMATION (Cite spe	actic reference as		<u> </u>			
·		g., stere was, sample analysis.	reports)			
NJDEP/DHWM/BHWE Files	;	•				
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FORM 2070 42 47 04			•			

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POTENTIAL HAZARDOUS WASTE SITE SITE INSPECTION REPORT PART 10 - PAST RESPONSE ACTIVITIES

I. IDENTIFICATION

01 STATE 02 SITE NUMBER

N.I D00218289

ACIA	PART 10 - PAST RESPONSE ACTIVIT	TIES NJ D00218289
PAST RESPONSE ACTIVITIES		
01 C A. WATER SUPPLY CLOSED 04 DESCRIPTION	02 DATE	O3 AGENCY
U4 DESCRIPTION		
01 D B. TEMPORARY WATER SUPPLY PROVI	IDED 02 DATE	03 AGENCY
04 DESCRIPTION		
01 C. PERMANENT WATER SUPPLY PROVIDED OF DESCRIPTION	DED 02 DATE	O3 AGENCY
04 DESCRIPTION		03 AGENCY
RS has had numerous instance	es of spill cleanup.	
01 SE CONTAMINATED SOIL REMOVED	02 DATE	O3 AGENCY
in July 1985. A	ttoobmonto I N 15	Drum warehouse area excavated
in July 1985. A	O2 DATE	03 AGENCY
Occasionally ne	cessary.	
01 G. WASTE DISPOSED ELSEWHERE	O2 DATE	D2 ACENOV
04 DESCRIPTION	02 DATE	US AGENCY
01 E H. ON SITE BURIAL	O2 DATE	03 AGENCY
04 DESCRIPTION		
01 🗆 I. IN SITU CHEMICAL TREATMENT 04 DESCRIPTION	O2 DATE	03 AGENCY
01 C J. IN SITU BIOLOGICAL TREATMENT 04 DESCRIPTION	02 DATE	03 AGENCY
U4 DESCRIPTION		•
01 TK. IN SITU PHYSICAL TREATMENT 04 DESCRIPTION	02 DATE	03 AGENCY
04 DESCRIETION		
01 C L ENCAPSULATION 04 DESCRIPTION	02 DATE	03 AGENCY
04 DESCRIPTION		
01 DM. EMERGENCY WASTE TREATMENT 04 DESCRIPTION	02 DATE	O3 AGENCY
U4 DESCRIPTION	•	
01 IN CUTOFF WALLS	02 DATE	03 AGENCY
04 DESCRIPTION		
01 D O EMERGENCY DIKING/SURFACE WATER	R DIVERSION 02 DATE	03 AGENCY
04 DESCRIPTION	· · · · · · · · · · · · · · · · · · ·	OU NULTE :
01 P. CUTOFF TRENCHES SUMP	02 DATE	00 405100
04 DESCRIPTION	VZ UNIL	03 AGENCY
01 C Q SUBSURFACE CUTOFF WALL	02 DATE	03 AGENCY
04 DESCRIPTION	*= -···-	US AGENOT

\$EP	١
II PAST RESPO	N
	_

POTENTIAL HAZARDOUS WASTE SITE SITE INSPECTION REPORT PART 10 - PAST RESPONSE ACTIVITIES

I. IDENTIFICATION

01 STATE 02 SITE NUMBER

NJ D002182897

· •	ART 10 - PAST RESPONSE ACTIVITIES	NJ D00210209
PAST RESPONSE ACTIVITIES (Continued)		
01 ☐ R. BARRIER WALLS CONSTRUCTED 04 DESCRIPTION	02 DATE	03 AGENCY
0 · 0255 · · · · / · · · · ·		
01 S. CAPPING/COVERING 04 DESCRIPTION	O2 DATE	03 AGENCY
ov besonii risiv		
01 T. BULK TANKAGE REPAIRED	02 DATE	03 AGENCY
04 DESCRIPTION		·
01 © U. GROUT CURTAIN CONSTRUCTED 04 DESCRIPTION	02 DATE	03 AGENCY
· ·		
01 Z V. BOTTOM SEALED 04 DESCRIPTION	02 DATE	03 AGENCY
04 DESCRIPTION		
01 T W. GAS CONTROL 04 DESCRIPTION	02 DATE	03 AGENCY
04 DESCRIPTION		
01 Z X. FIRE CONTROL	02 DATE	03 AGENCY
04 DESCRIPTION		
01 C Y. LEACHATE TREATMENT	02 DATE	03 AGENCY
04 DESCRIPTION		
01 ZZ. AREA EVACUATED	02 DATE 10/1/81	03 AGENCY
04 DESCRIPTION As a result of th	ie fire on 10/1/81, Linden a	airport and several miles
Route 1 were closed during	the incident.	
01 = 1. ACCESS TO SITE RESTRICTED 04 DESCRIPTION	02 DATE	03 AGENCY
01 C 2. POPULATION RELOCATED 04 DESCRIPTION	02 DATE	03 AGENCY
	·	
	02 DATE	

III. SOURCES OF INFORMATION (Cite specific references, e.g., state (ides, sample energias, reports)

NJDEP/DHWM/DWR/DWQ Metro Region Files NJDEP/DWM/BHWE Files NJDEP/DWR Central Files



POTENTIAL HAZARDOUS WASTE SITE SITE INSPECTION REPORT PART 11 - ENFORCEMENT INFORMATION

I. IDENTIFICATION

01 STATE 02 SITE NUMBER NJ D002182897

II. ENFORCEMENT INFORMATION

01 PAST REGULATORY/ENFORCEMENT ACTION X YES DO

02 DESCRIPTION OF FEDERAL, STATE, LOCAL REGULATORY/ENFORCEMENT ACTION

- o Lawsuit: NJDEP vs SRS

 Arose out of spill on May 22, 1975.
- o Notice of Violation Dated July 11, 1975 SRS failed to have federal SPCC plan.
- o Notice of Prosecution Dated July 25, 1978. SRS refused to file manifests deemed confidential.
- o Notice of Violation Dated February 19, 1974 SRS released effluent without a permit.
- o Notice of Prosecution Dated July 20, 1981 SRS operated in area other than in engineering designs.
- o Notice of Prosecution Dated July 20, 1981 SRS required to remove contaminated soil.
- o Administrative Consent Order Dated November 12, 1981 Arose from a fire and explosion on October 1, 1981.
- o Notice of Violation Linden Roselle Sewerage Authority cited SRS for numerous violations.
- o Administrative Consent Orders Dated July 1982, October 1983, April 1985, August 1985

SRS required to excavate contaminated soils.

On January 19, 1988 the state issued a final Hazardous Waste Facility Permit (2009 C1) and Major Modification of NJPDES-SIU Permit (#NJD0002224) to SRS, replacing the ACO's under which the facility formerly operated.

III. SOURCES OF INFORMATION (Cité specific references e.g., state files, sample analysis, reports)

NJDEP - DHWM - BHWE Files

NJDEP - DWR - Metro Region Files

NJDEP - DWR - BGWQM Files

SOLVENTS RECOVERY SERVICE (SRS) 1200 SYLVAN STREET, LINDEN CITY UNION COUNTY, NEW JERSEY NJD002182897

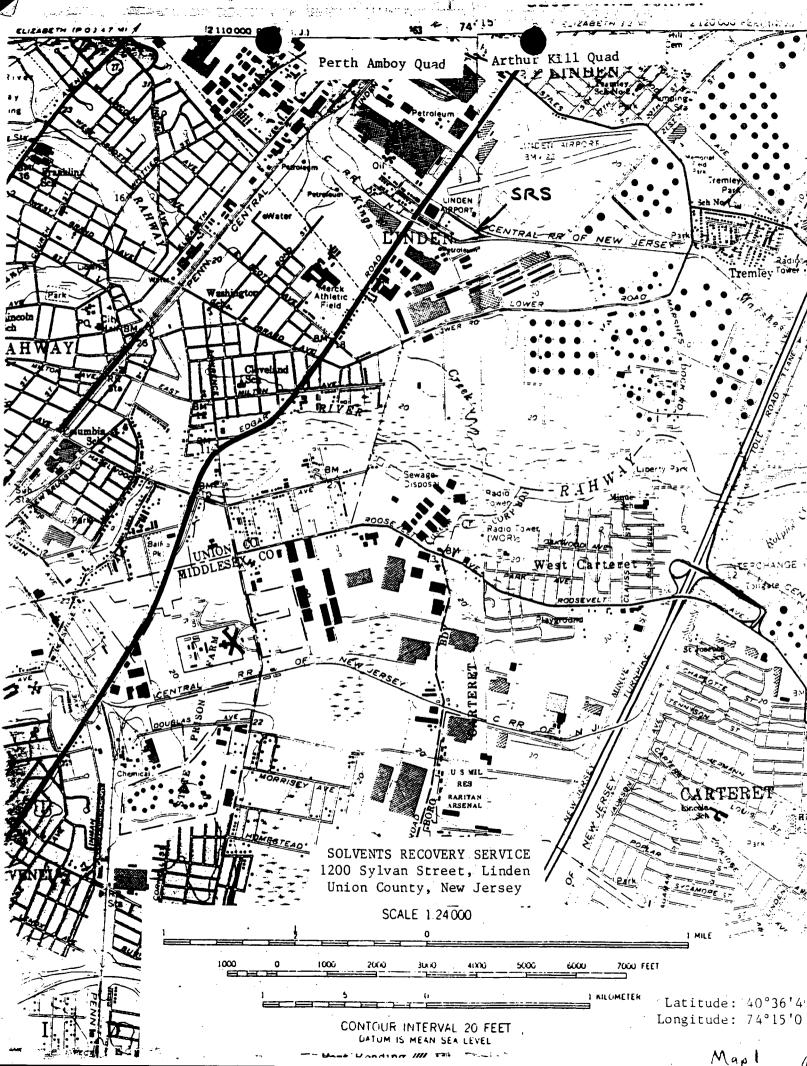
TABLE OF CONTENTS

MAPS:

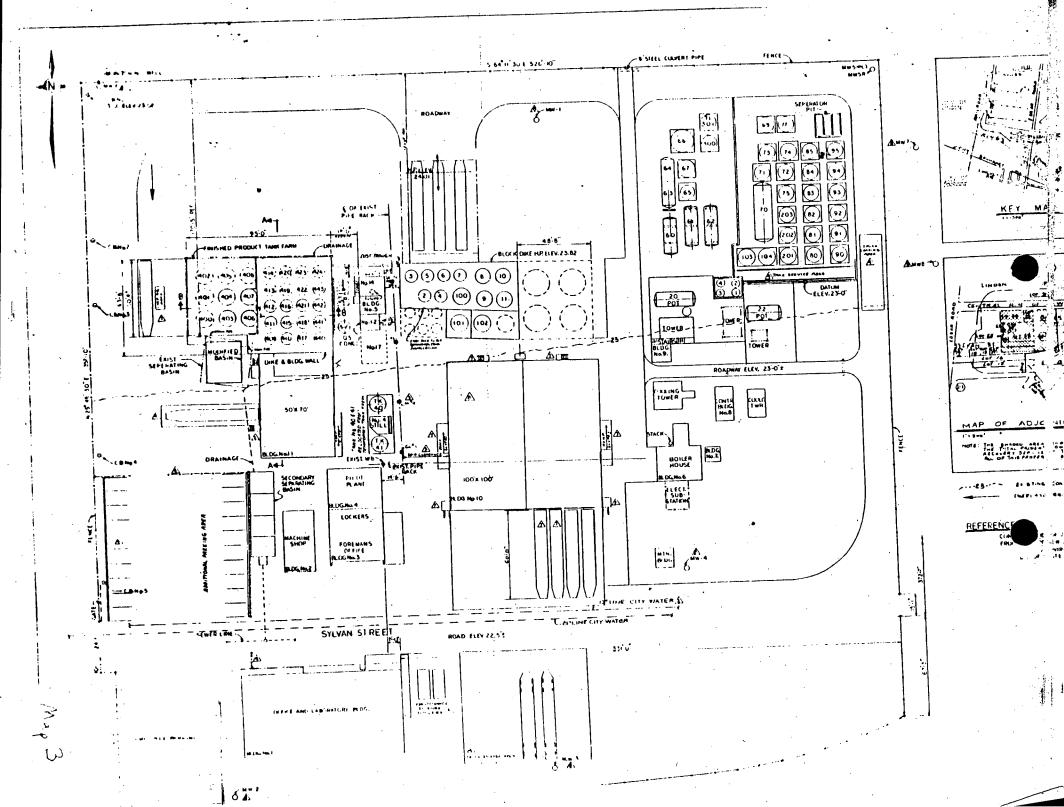
- 1. U.S.G.S. MAP, PERTH AMBOY AND ARTHUR KILL QUADRANGLES
- 2. HAGSTROM MAP OF UNION COUNTY
- SRS SITE MAP
- 4. TAX MAP
- 5. FLOOD INSURANCE RATE MAP
- 6. NEW JERSEY ATLAS, BASE MAP, SHEET 26
- 7. NEW JERSEY ATLAS, WATER SUPPLY MAP
- 8. NEW JERSEY ATLAS, GEOLOGIC OVERLAY AND INDEX
- 9. NJDEP-DWR WATER WITHDRAWAL MAP AND INDEX

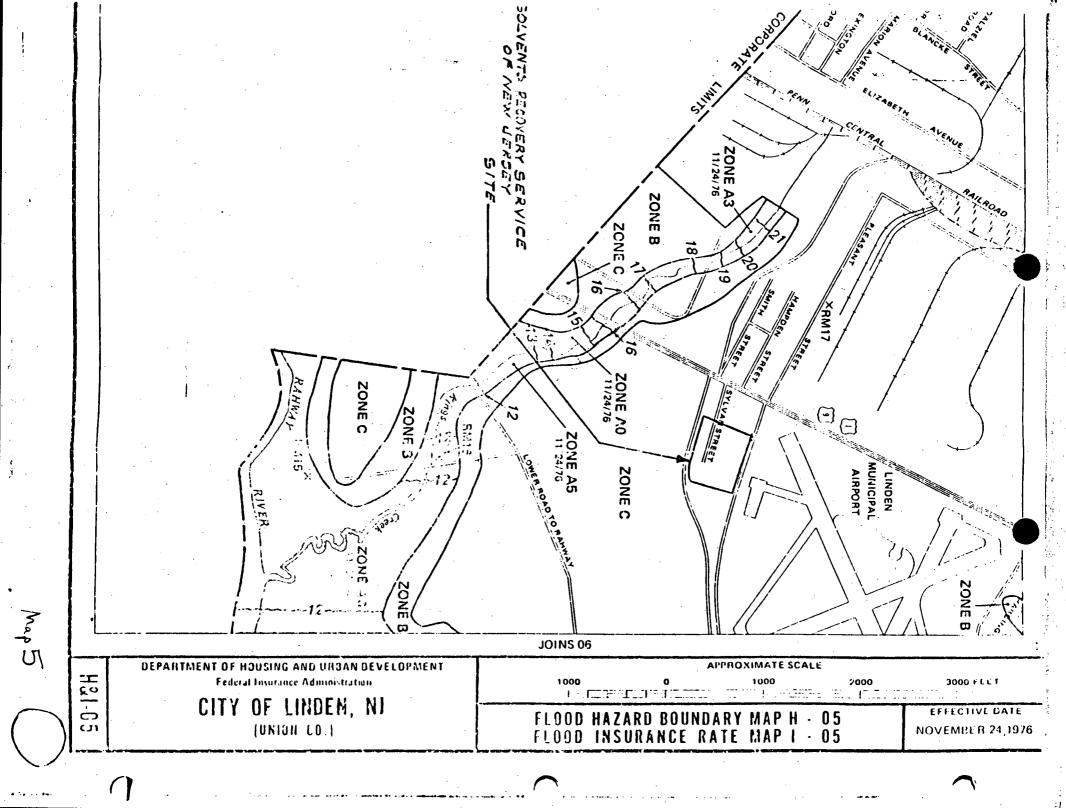
ATTACHMENTS:

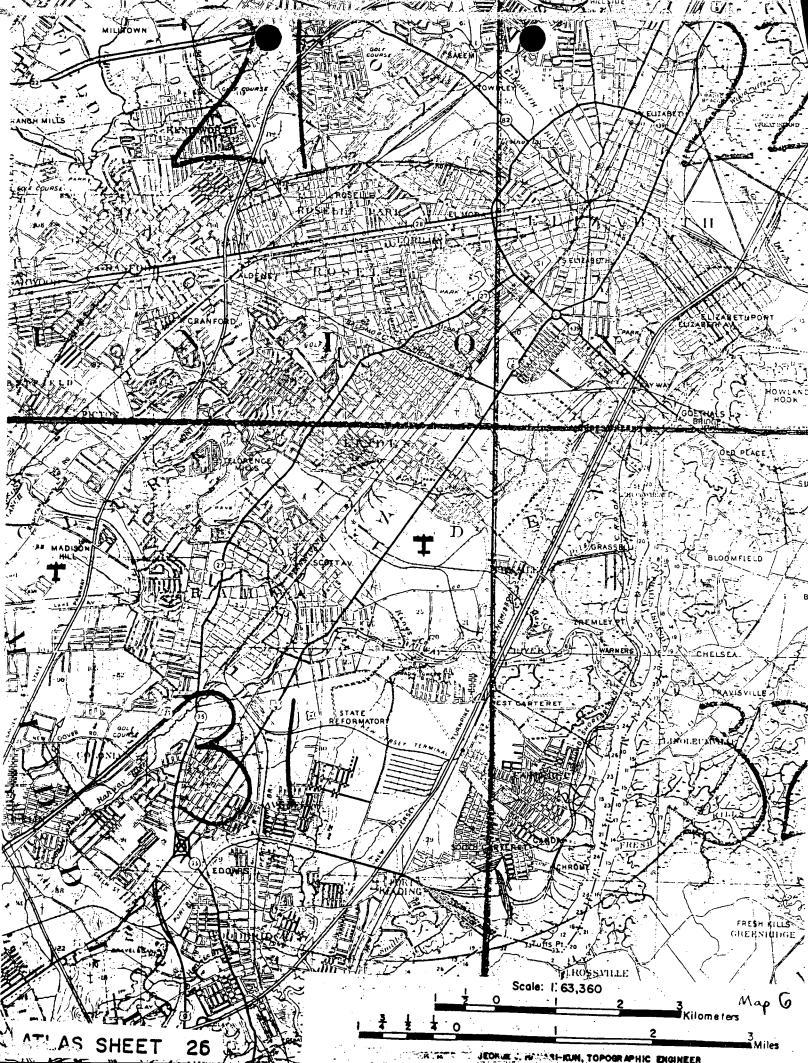
- A. FINAL HWF AND NJPDES-SIU PERMIT
- B. PART A APPLICATION
- C. PART B INFORMATION
- D. SRS' PROCESS DESCRIPTION
- E. PERMIT RELATED FACT SHEETS
- F. GENERAL SITE INFORMATION
- G. GROUNDWATER AND SOIL ASSESSMENT PLANS
- H. WASTEWATER DISCHARGE, OLD NJPDES PERMIT
- I. AIR RELEASE, PERMIT AND DOCUMENTS
- J. SITE INSPECTIONS, SPILLS, SEWER AND SURFACE WATER CONTAMINATION
- K. GROUNDWATER AND SOIL SAMPLING RESULTS
- L. WAREHOUSE, SOIL EXCAVATION (ACO)
- M. EXPLOSION, RESULTING SURFACE WATER CONTAMINATION
- N. LAGOON, USE AND EXCAVATION (ACO)
- O. HISTORY OF PROPERTY OWNERSHIP

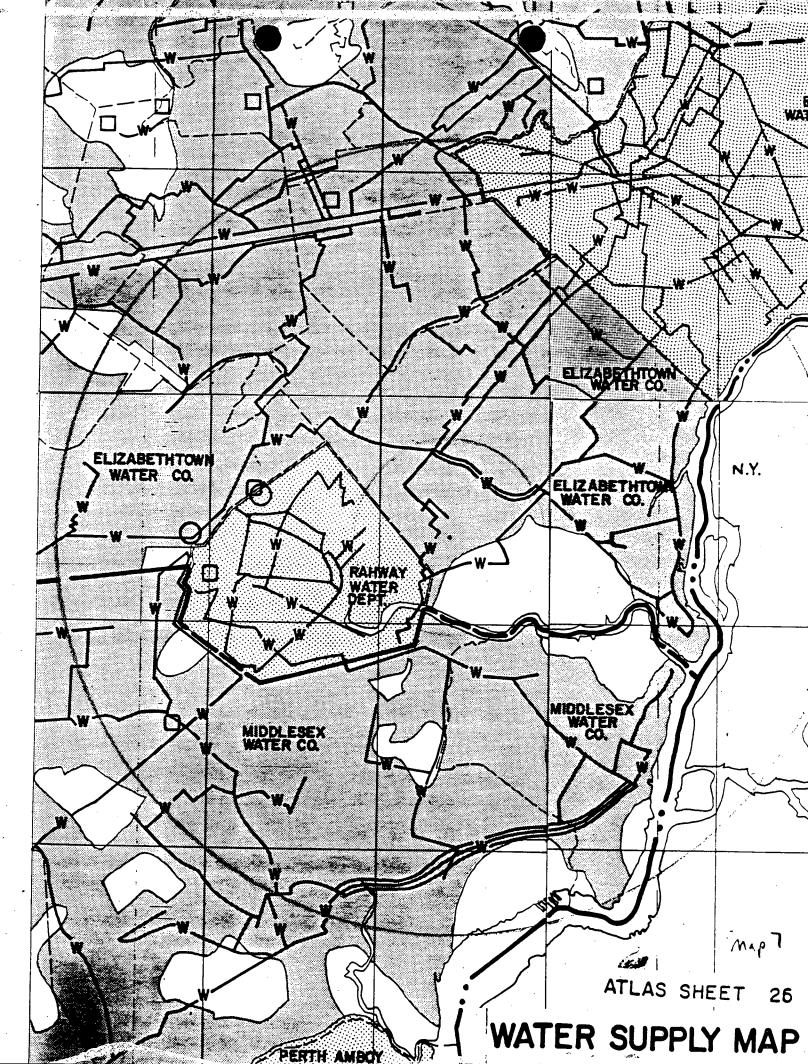


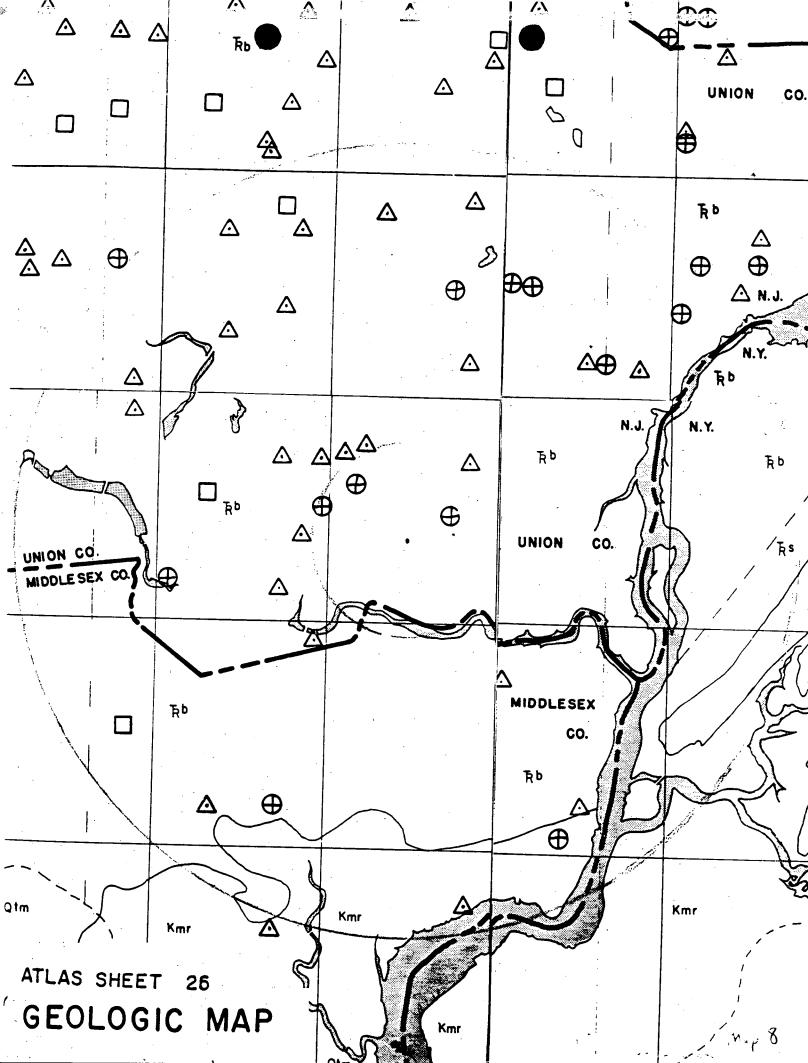












LEGEND FOR ATLAS SHEET 26 (GEOLOGY)

	$oldsymbol{1}$
△ —	INDUSTRIAL WELL YIELD OVER 70 GALLONS PER MINUTE (INCLUDING PRIVA
	PUBLIC SUPPLY WELL YIELDING OVER 70 GALLONS PER MINUTE
⊕ —	UNSUCCESSFUL ROCK WELL YIELDING LESS THAN 70 GALLONS PER MINUTE
⊙ —	UNSUCCESSFUL SAND WELL YIELDING LESS THAN 70 GALLONS PER MINUTE
+	NO TEST - NO DATA ON YIELD
	II
	FAULT (DASHED WHERE INFERRED)
	CONTACT (DASHED WHERE INFERRED)
Mikat kiripang Kapatan Karana	PHYSIOGRAPHIC PROVINCE BOUNDARY
-	NATER SUPPLY TRANSMISSION LINE
["	HERE THE PRECAMBRIAN FORMATION BOUNDARIES TERMINATE ABRUPTLY, I IS THE GEOLOGIST'S OPINION THAT THE GEOLOGICAL COMPLEXITY OF THE REA PREVENTS FURTHER INTERPRETATIONS.
Kmr —	RETACEOUS MAGOTHY AND RARITAN FORMATIONS (SAND AND CLAY)
76 — ·	RIASSIC BRUNSWICK FORMATION
1 c	RIASSIC CONGLOMERATE BEDS OF THE STOCKTON FORMATION
RI 1	RIASSIC LOCKATONS FORMATION
T db —	TRIASSIC DIABASE
% bs	TRIASSIC BASALT FLOWS
° 34 — \$	ILURIAN DECKER LIMESTONE AND LONGWOOD SHALE FORMATIONS
3gp — S	ILURIAN GREEN POND CONGLOMERATE
Omb — 0	RDOVICIAN MARTINSBURG SHALE
601 — C	AMBRO ORDOVICÍAN KITTATINNY LIMESTONE
	AMBRIAN HARDYSTON SANDSTONE
	RECAMBRIAN:
	Ch-HORNBLENDE GRANITE WITH PYROXENE GRANITE
	gg - AL ASKITE
	dm- AMPHIBOLITE

M - SKARN , GRAPHITE SCHIST

- A. Elizabeth, Roselle
- B. Arthur Kill-Morses Creek, Rahway, Elizabeth
- C. 1. Cranford Non-recording temperature and precipitation gauges Springfield - Recording precipitation gauge

2.	Map No.	Location	Period of Record
	68	Elizabeth River at Nye Ave., Irvington	7/23/38
	69	Elizabeth River at Lyons Ave., Irvington	7/23/38
	70	Elizabeth River at York Ave., Irvington	7/23/38
	71	Elizabeth River at Chancellor Ave., Irvington	7/23/38
	73	West Branch Rahway River at Millburn	1938,1940-1950
	74	Rahway River near Springfield	1938-

Water Quality Standards: (explained in Atlas Sheet description) FW2 except where classified FW3

- D. Brunswick Formation (Trb), Basalt Flows (Trbs)
- E. 1. Physiographic Province: Piedmont Subdivision: Triassic Lowlands

Major Topographic Features: Wisconsin Terminal Moraine, Red Sandstone

Plain

Elevations (ft.above sea level): ridges 500, valleys 50

Relief (ft.): 450

2. a. Normal Year: 47"
Dry Year: 39"

Wet Year: 55"

- b. January: 32°F July: 74°F
- c. 242 days. Last killing frost: 4/20; first killing frost: 10/20
- 3. a. About 75% is urban or suburban. Areas of Clark, Cranford, Elizabeth, Hillside, Irvington, Millburn, Springfield, Union, Westfield are included.
 - b. Agricultural production is not a significant land use.
 - c. About 15% covered by oak forest. Forested areas primarily within the Watchung Reservation, South Mountain Reservation, and Rahway River Park System.
 - e. Traprock from quarries in Springfield.
 - d. Garden State Parkway, U.S.22, N.J.28, N.J.24, and N.J.527. Railroads - Lehigh Valley, Penn Central, Central Railroad of New Jersey, Erie-Lackawanna, Rahway Valley
- F. Essex County:

South Mountain Reservation

Union County:

Lenape Park

Rahway River Parkway

Galloping Hill Park and Golf Course

Warinanco Park

Short Hills Water Company:

Private Watershed

H. First Presbyterian Connegation of Connecticut Farms, Union

I. Water Well Records

1. Water W	ell Kecolds		_		•	
			Screen			
	•		Setting			
_	•	Year	or Depth	Total	g/m	
Location	<u>Owner</u>	<u>Drilled</u>	of Casing	Depth		Formation
26-21-131	City of Orange	1960	75	75	No test	
26-21-138	Twp. of Millburn	1967	83	300	214	Trb
26-21-151	Millburn Springfield Co.	1956	37	645	75	Trbs-Trb
26-21-155	Short Hills Water Co.			84	677	Q
26-21-159	"			76	690	11
26-21-167	Hudson Mfg.	1966	80	210	60	Trb
26-21-175	Baltrusal Golf Club			288	32	-11
26-21-177			÷	515	94	11
26-21-229	Maplewood Country Club	1963	54	298	488	- 11
26-21-246	Elizabethtown Water Co.		•	400	93 -	11
26-21-247	17	•		130	400	11
26-21-268	Voorhees & Son			220	126	11
26-21-275	Bardy Farms	1955	30	450	150	11
26-21-289	Interchemical Corp.	•		349	200	**
26-21-294	Ansco	1949	60	385	200	11
26-21-352	Olympic Park			300	420.	11
26-21-364	Irvington, City of	•		452	45	11
26-21-391	Bennet Oil Co.			298	100+	
26-21-395	Hatfield Cable & Wire Co.			380	150	11
26-21-397	Cooper Alloy Foundry Co.	•		325	95	19
26-21-399	Atlas Tool Co.	1959	51	300	165	11
26-21-419	Prince & Ganska Farm			255	275	11
26-21-448	11	1954	58	420	300	11
26-21-451	Howard Johnson's Rest.			200	110	11
26-21-461	Potter Engineering			70	180	Q
26-41-463	Accurate Bushing Co.	1974	135	250	165	Trb
26-21-484	Plainfield-Union Water Co.			250	160	11
26-21-491	Elizabethtown Water Co.	1965	123-1/2	300	400	11
26-21-521	Kratt, Wm. & Co.			345	210	
26-21-527	Pyro-Plastics			344	250	FF
26-21-533	Food Fair Stores, Inc.	1955	27'9"	485	110	**
26-21-538	Union Co. Park Commission		<u> </u>	84	350	Q
26-21-566	Sucad, Inc.		* .	235	70	Trb
26-21-573	Plainfield-Union Water Co.	1955	181'10"	522	448	11
26-21-586	Rotary Pen Co.	1962	43.5	405	120	11
26-21-589	it	1963	47	402	165	11
26-21-591	White Laboratories, Inc.	-,	,,	470	530	**
26-21-627	Garden State Bowling Alley	1958	41	425	250	11
26-21-659	Progressive Products	2,500	. • •	150	198	11
26-21-663	Elizabethtown Water Co.		•	400	525	11
26-21-666	Schering Corp.	1955	50	475	550	11
26-21-742	Diamond Expansion Bolt Co.	1963	51	260	300	***
26-21-745	Circle Plastics Co.	1962	40			11
26-21-751	Aeolian Co.	1902	40	302	250	
26-21-761	and the second s	1067	03/50	136	175	11
26-21-798	Lampert Dairy Farms, Inc.	1967	23/52	270	.6	**
	Fibro Corp.	1957	67	250	75	
26-21-827	Gibson Associates	1956	32 ' 4''	271	274	11
26-21-834	Plainfield-Union Water Co.	1957	36 ' 8''	509	457	

- 26-21-838	All Disc Records	1963	36	300	215	Trb
- 26-21-867	Food Fair Stores, Inc.		•	304	150	- 11
- 26-21-881	Benderson Development, Inc.	1963	21'8"	300	383	11
- 26-21-916	National Color Laboratory	1964	41.5	282	239	11
- 26-21-935	Leland Tube Co.	1965	33	500	100	11
- 26-21-964	Lampert Dairy Farms, Inc.	1959	62.5	803	72	11
- 26-21-995	Eastern Packing Co.			400	100	11

J. Geodetic Control Survey monuments described Index Maps 25,26; adjacent Index Maps 30,31

BLOCK #26-22

- A. Elizabeth
- 3. Arthur Kill-Elizabeth, Elizabeth Channel, Morses Creek; Passaic-Lower Passaic
- C. 1. Newark WSO AP Detailed meteorologic data

2.	Map No	. Location	Period of Record
	67	Elizabeth River at Irvington	1931-1938
	68	Elizabeth River at Nye Ave., Irvington	7/23/38
	72	Elizabeth River at Elizabeth	1921-
3.	262	Passaic River at Harrison	1967-1971
	272	Elizabeth River at Morris Ave., Elizabeth	1964-

Water Quality Standards: (explained in Atlas Sheet description) FW3, TW2 except where classified TW3

- D. Brunswick Formation (Trb), Stockton Formation (Trs), Diabase (Trdb)
- E. 1. Physiographic Province: Piedmont
 Subdivision: Triassic Lowlands
 Major Topographic Features: Wisconsin Terminal Moraine, Red Sandstone
 Plain, Hackensack Meadows, Newark Bay, Palisades Ridge
 Elevations (ft.above sea level): ridges 300, valleys 0
 Relief (ft.): 200
 - 2. a. Normal Year: 44"
 Dry Year: 36"
 Wet Year: 53"
 - b. January: 32°F July: 74°F
 - c. 243 days. Last killing frost: 4/15; first killing frost 10/20
- F. Essex County:
 Weequahic Park
 Union County:
 Elizabeth River Park
 Warinanco Park
- H. Boxwood Hall/Boudinot Mansion, Elizabeth (State Owened)

I. Water Well Records

I. Water Well Records										
		Screen								
	•		Setting	<u>;</u>						
		Year	or Depth	Total	g/m	_				
Location	<u>Owner</u>	<u>Drilled</u>	of Casing	Depth	Yield	Format	10n			
26-22-143	Irvington Smelting & Ref. Wks.	1953	71	209	192	Trb				
26-22-143		1953	62'4"	304	300	11 .				
26-22-145	Associated Mech.Devices	1960	83	250	80	11				
26-22-149	Gallo Asphalt Co.	1961	107	201	200	11				
26-22-213				656	435	17				
26-22-228	Smith & Smith Funeral Parlor			776	25	n				
26-22-234	U.S. Navy			565	39	**				
26-22-237	Conmar Corp.			300	450	11				
26-22-262	National Lock Washer Co.	•		800	100	- 11 - 11				
26-22-275	Linde Air Products Co.	1954	44 ' 5''	500	124	•				
26-22-293	New York Port Authority	1968	60	370	260	"				
26-22-322	Standard Bitulithic Co.	1964	89'11"	406	360	ff , ff				
26-22-327	Pfeiffer, H.			505	12					
26-22-333	Arkansas Co., Inc.	1965	72'9"	400	65	11				
26-22-333	Ronson Metals Corp.	1965	80	300	220	11				
26-22-334	Wilson, H.A. Co.		•	778	8	11	-			
26-22-345	Chem-Fleur	1965	97	306	200 -					
26-22-355	Englehard Ind., Inc.	1966	54/79'8''		167	***				
26-22-355		1965	80 ' 7''	400	401	11				
26-22-356	••	1966	78.5/92	495	4	11				
26-22-368	Rutherford & Delaney Hldg.Co.	1956	42	220	100	11				
26-22-411	Bristol Meyers	1967	49	500	159	11				
26-22-418	Dillon-Beck Mfg. Co.		-	379	100	11				
26-22-449	Elizabethtown Water Co.	•		400	550	11				
26-22-463	Orbis Products Corp.	1958	157	350	12	11				
26-22-517	Pennick, S.B. Co.	1961	64'10"	585	24	11				
26-22-518	Pure Carbonic			600	30	ft				
26-22-546	Black Diamond Grit Co.	1960	92	265	150	11				
	Londat Aetz Fabric Co.	1965	50	600	30	11				
26-22-574	Elizabeth Abbatoir		•	641	75	11				
- 26-22-744	Morey LaRue Laundry		•	700	15	11				
- 26-22-745	11			600	14	11				
- 26-22-785	Stevenson Car Co.			300	95	11				
- 26-22-786	Feldman Brothers			805	54	11				
- 26-22-795	Reichold Chemical Co.	1967	39 '6"	400	415	11				
26-22-828	Singer Mfg. Co.			1200	90	11				
26-22-833		1965	106	500	70	11				
26-22-842	· ·			500	50	11				
- 26-22-847	Elizabethtown Gas & Light			300	0	11				
26-22-852	Riker Motor Co.		•	500	0	11				
26-22-854	Thomas & Betts Co., Inc.			500	264	11				

J. Geodetic Control Survey monuments described Index Map 26; adjacent Index Map 31

- A. Arthur Kill, Elizabeth, Perth Amboy, Roselle
- B. Arthur Kill-Morses Creek, Rahway, Woodbridge River; Raritan-Lower Raritan
- C. 1. Rahway Recording and non-recording precipitation gauges

2. Map No	Location	Period of Record
75	Rahway River at Rahway	1908-1915, 1921-
77	Robinsons Branch Rahway River at Rahway	1939-

3. 75 Rahway River at Rahway 1939-77 Robinsons Branch Rahway River at Rahway 1964-273 Rahway River at Rahway, Woodbridge-Hazelhurst Ave. 1964-

Water Quality Standards: (explained in Atlas Sheet description) FW2, TW2 except where classified FW3 or TW3

- D. Wisconsin Terminal Moraine (Qtm), Magothy and Raritan Formations (Kmr), Brunswick Formation (Trb)
- E. 1. Physiographic Province: Piedmont

Major Topographic Features: Wisconsin Terminal Moraine, Red Sandstone Plain

Elevations (ft.above sea level): hills 150, valleys 0 Relief (ft.): 150

Physiographic Province: Coastal Plain

Subdivision: Triassic Lowlands

Subdivision: Inner Plain

Major Topographic Features: Arthur Kill, Clay and Marl Region

Elevations (ft.above sea level): hills 200, valleys 0

Relief (ft.): 200

2. a. Normal Year: 46"
Dry Year: 38"
Wet Year: 52"

b. January: 32°F July: 74°F

- c. 242 days. Last killing frost: 4/20; first killing frost: 10/20
- F. Middlesex County:

Merrill Park
Roosevelt Park
Union County:
Rahway River Parkway
Middlesex Water Company:

Private Watershed

I. Water Well Records

			Setting		•	
		Year	or Depth	Total	g/m	
Location	Owner	Drilled	of Casing	Depth	Yield	Formation
- 26-31-132	Hyatt Roller Bearing Div.			501	500	Trb
~ 26-31-237	Tingley-Reliance Rubber Co.			122	120	11
- 26-31-239	Hatfield Wire & Cable Co.	1959	52	350	323	**
- 26-31-243	Rahway, City of	1953	21.75	57	355	Q
- 26-31-266	Quinn & Boden	1966	35	35	23	Trb
- 26-31-268	n i			357	150	11
26-31-274	Rahway, City of			301	12	11
- 26-31-294	Rahway Theater			349	100	11
- 26-31-315		1959	40	550	70	11
- 26-31-317	General Gum Products	1953	39 '9''	316	100	**
— 26 – 31 – 338	Winews, C.H. & John			200	750	***
- 26-31-342	Layne, New York Co.	1955	36	310	30	11
- 26-31-364	Lampert Dairy Farms Inc.	1967	39	290	17	11
— 26 – 31–465	Middlesex Water Co.	1964	32'8"	505	495	11
- 26-31-533	Maclac Co.			151	91	11
- 26-31-576	Costa's Ice Cream Co.	1961	40	359	300	11
- 26-31-594	Security Steel Equip. Inc.	1957	26	614	34 -	11
26-31-861	Sabol National Grocery	1956	24	200	70	**
26-31-891	Swift & Co.	1955	43'8"	61	70	Kmr
26-31-894	California Refining Co.		•	288	92	110
- 26-31-938	Second Reverse Terminal Inc.	1958	109'6"	168	150	Q

Screen

J. Geodetic Control Survey monuments described Index Maps 30,31; adjacent Index Maps 25,26

- A. Arthur Kill, Elizabeth
- B. Arthur Kill-Morses Creek, Rahway, Woodbridge
- C. Water Quality Standards: (explained in Atlas Sheet description) FW3, TW2 except where classified TW3
- D. Wisconsin Terminal Moraine (Qtm), Magothy and Raritan Formation (Kmr), Stockton Formation (Trs), Diabase (Trdb), serpentine (sp)
- E. 1. Physiographic Province: Piedmont
 Subdivision: Triassic Lowlands
 Major Topographic Features: Red Sandstone Plain, Arthur Kill
 Elevations (ft.above sea level): hills 30, valleys 0
 Relief (ft.): 30

Physiographic Province: Coastal Plain Subdivision: Inner Plain Major Topographic Features: Arthur Kill, Clay and Marl Region Elevations (ft.above sea level): hills 20, valleys 0 Relief (ft.): 20

- 2. a. Normal Year: 46"
 Dry Year: 38"
 Wet Year: 52"
 - b. January: 32°F
 July: 74°F
 - c. 242 days. Last killing frost: 4/20; first killing frost: 10/20
- I. Water Well Records

				,		
		Year	or Depth	Total	g/m	
Location	Owner	Drilled	of Casing	Depth	Yield	Formation
-26-32-417	Gulf Stream Development	1967	54	145	100	Trdb
~ 26-32-485	Liebig Works			60	200	Q
~ 26 - 32 - 487	U. S. Metals Refining Co.			117	0	Kmr

J. Geodetic Control Survey monuments described Index Map 31; adjacent Index Map 26

SUBJECT TO REVISION

Solvents Recovery Service Linden, Union

WATER WITHDRAWAL POINTS AND NJGS CASE INDEX SITES WITHIN 5.0 MILES OF:

LATITUDE 403649 LONGITUDE 741507

DRAFT

SCALE: 1:63,360 (1 Inch -- 1 Mile)

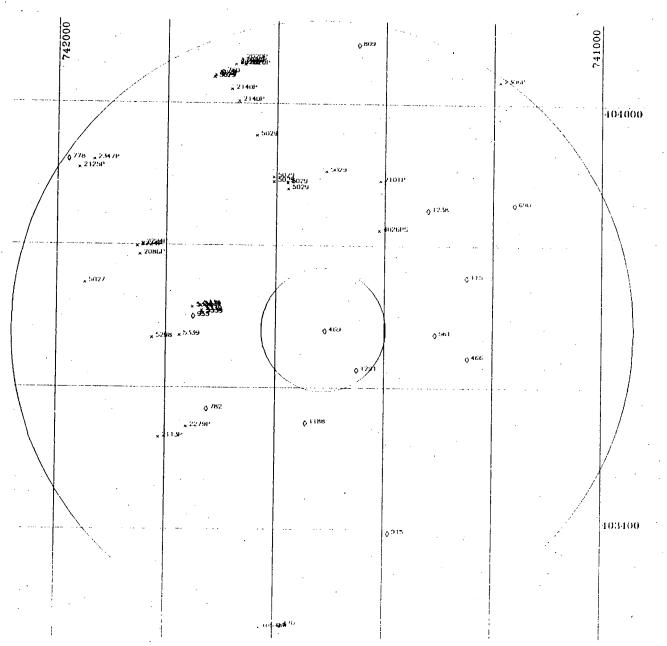
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- A WATER WITHDRAWAL POINTS
- O NUGS CASE INDEX SHES
- 1 MILE AND 5 MILE RADIC INDICATED

NUCS CASE INDEX DATA RETRIEVED FROM: NEW JERSEY GEOLOGICAL SURVEY ON 12/72/87

PLOT PRODUCTO BY NARLP INVERSE OF WATER RESOURCES, BURLAD OF WATER ALLOCATION CN 0.29 BY NEON, 140 - 09625 DATE - 05/25/788

JIBH CL TO REVISION



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CUTCUT	OUTERING CONFURNITION	46000076		40/19337	741615		4.9	25	25	62	GEM		120
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DV194F1	TAILTE STATES CATSUM COMPANY	26000204	5	404033	7 4164 6		4.5	39	Ø8	500	GIRB		4501
21600	HET LYALLE FLASTICS, INC.	2604727	2	403752	741829	U	3.2	39	Ø 2	303	GIT48		250
30,173	CLE LIGHTY COUNTRY CLUB	2601906		403855	741405		2.6	3 9	Ø4	570	GTRE		2000
21259	· LIFFIER FACKAGING CORFORATION -	2602649	1	403518	741807		3.1	23	25	314	GTRE		4600
231.4 61 03	FIGURATION CORRESPONDED	2602601	WELL #1		741936		4.7	39	26	300	GTER		2000
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10 O He	MADE HAVE INDUSTRIES INC.	4600107		40400 2	741 642		3.9	39	Ø 8	402	GTRB		105
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2224.70	GYPWOOD TYPETHOUSED MILL	4600192	1 .	404019	, 41104	Angles Ja	4.9	39	19	274	GTRIB '		100
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	EL. (20) ETHTOWN WATER CONFYNY	26022393	ELIXS OLUB	403726			3.9	39	0 2	59	GOSD		206
	ELIZACETHICHIN WATER COMPANY	7601696	CHANDLER	40370		- A	2.6	39	14		GIFE		3606
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	ELIZARETHIOUN WATER COMPANY	2602360	WALAEURGA1	403ES		-30	2.5	39.	14		GTK19		350
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	BLIZABETHUOWN WATER COMPANY	46000015	WALAEURGA4	403853		To the	2.4	39	14		GTRB		450
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Number of Observations: 13



State of New Jersey DEPARTMENT OF ENVIRONMENTAL PROTECTION

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DIVISION OF HAZARDOUS WASTE MANAGEMENT

John J. Trela, Ph.D., Director 401 East State St. CN 028 Trenton, N.J. 08625 609 - 633 - 1408

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Mr. James R. Hulm Solvents Recovery Service of New Jersey, Inc.. 1200 Sylvan Street Linden, NJ 07036

RE: Final Hazardous Waste Facility (HWF) and Discharge to Ground Water Major Modification of NJPDES Significant Industrial User Permit No. NJ0002224 for Solvents Recovery Systems of New Jersey, Inc. (SRSNJ), 1200 Sylvan Street, City of Linden, Union County

Dear Mr. Hulm:

Enclosed is the final Hazardous Waste Facility (HWF) Permit that has been prepared by the Division of Hazardous Waste Management pursuant to N.J.A.C. 7:26-12.11(a) for the referenced existing major commercial Hazardous Waste storage and treatment facility operated by SRSNJ, as well as a final Major Modification to the New Jersey Pollution Discharge Elimination System (NJPDES) Significant Industrial User (SIU) - which is a Discharge to Ground Water Permit (DGW) that has been issued by the Division of Water Resources pursuant to N.J.A.C. 7:14A-1 et seq. The Environmental Protection Agency (EPA) will be issuing their portion of the Permit in the near future. The issuance of all three permits constitutes the official RCRA HWF operating permit, which include provisions for the Hazardous and Solid Waste Amendments (HSWA) of 1984. The Division of Water Resources and Division of Hazardous Waste Management Response to Comments Documents on the Draft Permits are also enclosed.

The final HWF permit and final DGW Major Modification to the NJPDES permit are being issued jointly and together comprise the Department's hazardous waste permit action regarding the subject facility.

Please note that the Department has not included the planned railroad tank car unloading and loading station on leased railroad track and the planned truck loading and loading station in the subject hazardous waste facility permit because SRS has not provided adequate Part B details on said proposals in compliance with the requirements of N.J.A.C. 7:26-1 et seq. The submittal is deficient and does not include the following information:

- A general description of the waste handling operations at the planned stations.
- 2. Waste types and chemical and physical properties of waste to be handled.
- 3. General types of equipment to be used to control spills and procedures to dispose accumulated spills.
- 4. Number(s) and designed capacities of railroad tank cars and tank trucks.
- 5. Inspection plan

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- 6. Preparedness and prevention procedures
- 7. Contingency plan including a description of emergency procedures.
- 8. Engineering design plans showing locations and dimensions of the planned loading/unloading stations.
- 9. Length of time loaded tank cars or tank trucks containing hazardous waste are to be kept.
- 10. A diagram of piping to unload/load waste and location of fire control equipment.
- 11. Sampling method(s) and acceptance procedure(s) for waste loads.
- 12. Closure plan and cost estimate.
- 13. A detailed construction schedule for the planned tank truck loading/unloading station and a schedule of installation of spill pans and piping at the planned railroad tank car unloading and loading station.

Should SRS desire to pursue the addition of the railroad tank car unloading and loading station and the tank truck loading and unloading station to the permitted activities, then the company must submit complete Part B application details. The Department will process any such submittals as a permit modification per N.J.A.C. 7:26-12.6.

This final DGW Mast Modification of the NJR is permit is added to and made part of your Permit. This major modification is issued in accordance with the New Jersey Pollutant Discharge Elimination System Regulations, N.J.A.C. 7:14A-1 et seq. and you are required to comply with the terms and conditions of this Permit. Unless specifically mentioned in this major modification, you are not relieved from any of the requirements of the previously issued permit.

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The goals of the above-mentioned NJPDES DGW permit are to complete the ground water and soil assessment program, implement a ground water containment system and determine a final long-term corrective action strategy.

Please be aware of the following provisions of this permit:

- 1) Any existing wells must be certified by a licensed New Jersey Professional Engineer, a duly authorized representative, or an executive officer, and must be surveyed by a licensed New Jersey Land Surveyor. If the construction details or a location are unknown or cannot be determined, then a new well must be installed to be in accordance with the permit.
- 2) New ground water monitoring wells must be drilled within the time specified in the permit and certifications to location and construction shall be submitted in accordance with the conditions of this permit.
- 3) New Jersey State Well Permits shall be obtained for all new wells and any existing wells that were drilled without valid well permits.
- 4) Samples must be analyzed by a New Jersey Certified laboratory at the frequency and for the parameters specified in the permit.
- 5) Samples must be submitted on the enclosed forms. Data which are not submitted on these forms do not meet the reporting requirements of this permit. Data submitted for water analysis from uncertified wells are likewise unacceptable and do not fulfill the reporting requirements of the permit.
- 6) Please be advised that failure to meet the conditions of the permit can result in the imposition of substantial administrative, civil, and criminal penalties.

Please contact Bob Patel, Division of Hazardous Waste Management, Bureau of Hazardous Waste Engineering, at (609)292-9880 or Stanley Radon, Division of Water Resources, Ground Water Quality Control Section, at (609)292-8427, if you have any questions.

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Sincerely yours,

Ennest of Whilemy

Ernie Kuhlwein, Chief Bureau of Hazardous Waste Engineering Division of Hazardous Waste Management

WQM240

Enclosures
c: Barry Tornick, EPA Region II

Sincerely yours,

Kenneth Siet, Section Chief Ground Water Quality Control Section Division of Water Resources



DIVISION OF HAZARDOUS WASTE MANAGEMENT

John J. Trela, Ph.D., Director 401 East State St. CN 028 Trenton, N.J. 08625 609 - 633 - 1408

Hazardous Waste Facility Permit

Under the provisions of N.J.S.A. 13:1E-1 et seq. known as the Solid Waste Management Act, this permit is hereby issued to:

Solvents Recovery Service of New Jersey, Inc. 1200 Sylvan Street Linden, New Jersey 07036

For the Purpose of Operating a:

70 - 2.89302011

Hazardous Waste Storage and

Treatment Facility

on Lot No.:

21, 22, 23, 24, 26, 27, 28, 29

Block No.:

580

in the Municipality of:

Linden

County:

Union

Under Facility Permit No.:

2009C1

This permit is subject to compliance with all conditions specified herein and all regulations promulgated by the Department of Environmental Protection.

This permit shall not prejudice any claim the State may have to Riparian land nor does it permit the registrant to fill or alter, or allow to be filled or altered, in any way, lands that are deemed to be Riparian, Wetlands, stream encroachment or flood plains, or within the Coastal Area Facility Review Act (CAFRA) zone or allow the discharge of pollutants to waters of this State without first acquiring the necessary grants, permits, or approvals from the Department of Environmental Protection or the U.S. Environmental Protection Agency.

January 19, 1988

Date

Frank Coolick

Acting Assistant Director Division of Hazardous Waste

Management

January 19, 1993

Expiration Date

This permit, along with the referenced engineering plans and report herein specified, shall constitute the sole Hazardous Waste Facility Permit for the operations of a bulk and containerized liquid hazardous waste storage and treatment facility and a containerized solid hazardous waste transfer station by Solvents Recovery Service of New Jersey, Inc., Linden City, Union County. Any Registration or approval previously issued by the Division of Hazardous Waste Management or its predecessor agencies is hereby superseded.

This permit is issued and is effective for a term of five years. permit is not transferable to any person. The Department will require revocation and reissuance of the permit in accordance with N.J.A.C. 7:26-1 et seq. whenever ownership or operational control of a facility changes. The permittee need not comply with the conditions of this permit to the extent and for the duration such noncompliance is authorized by an emergency permit (N.J.A.C. 7:26-12.9).

The permit is conditioned upon compliance with and implementation of the following:

1) Duty to Comply

The permittee shall comply with all conditions of this Permit. Any permit non-compliance constitutes a violation of the Solid Waste Act (N.J.S.A. 13:1E-1.1 et seq.) and is grounds for enforcement action; for permit termination, revocation reissuance, modification; or for denial of a permit renewal application.

Any generator, hauler, facility operator or any other person who discharges or is responsible for discharge of hazardous waste on land or in the waters of the State of New Jersey or at any place other than an approved hazardous waste facility shall be subject to penalties pursuant to N.J.S.A. 58:10A-1 et seq.

2) Duty to Reapply

If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee shall submit a complete application for a new permit at least 180 days prior to permit expiration.

3) Duty to Halt or Reduce Activity

It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

4) Duty to Mitigate

The permittee shall take all reasonable steps to minimize or correct any adverse impact on the environment resulting from non-compliance with this permit.

5) Proper Operation and Maintenance

The permittee shall at all times properly operate and maintain the facility and systems of treatment and control, and related appurtenances, which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory and process controls, including appropriate quality assurance procedures. This provision requires the operation of backup or auxiliary facilities or similar systems only when necessary to achieve compliance with the conditions of this permit.

The permittee shall establish transfer operation work order forms for the facility. A transfer operation work order form shall be completed for each movement of waste, including transfer from incoming vehicles to a storage area, transfer between storage areas, transfer between storage areas and treatment systems, and transfer from storage areas to outgoing vehicles. The form shall include the number and specific identification of any drums being transferred, specific identification of tanks, process equipment, and vehicles involved, their locations, and the quantity of waste being transferred, as well as any specific operating procedures to be employed during the transfer operations. If a discrepancy occurs in any of these areas, then the transfer operator shall obtain written approval from supervisory personnel before continuing the transfer operation.

6) Permit Actions

This permit may be modified, revoked and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated non-compliance, does not stay any permit condition.

7) Property Rights

This permit does not convey any property rights of any sort, or any exclusive privilege.

8) Duty to Provide Information

The permittee shall furnish to the Department, within a reasonable time, any information which the Department may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance

The permittee shall also furnish to the with this permit. Department, upon request, copies of records required to be kept by this permit.

Right of Entry 9)

The permittee shall allow an authorized representative of the Department upon presentation of credentials to:

- Enter upon the permittee's premises where a regulated a) facility or activity is located or conducted, or where records shall be kept under the conditions of this permit;
- Have access to and copy any records that should be kept under b) the conditions of this permit;
- Inspect any facilities, equipment (including c) control equipment), practices, or operations regulated or required under this permit; and
- Sample or monitor for the purposes of assuring permit d) compliance or as otherwise authorized by the Solid Waste (N.J.S.A. 13:1E-1.1 et seq.),Management Act substances at any location.

10) Monitoring and Records

Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.

- The permittee shall retain records of all monitoring a) information, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least 3 years from the date of the sample, measurement, report, or application. period may be extended by written request with cause by a duly authorized official of the Department at any time.
- Records of monitoring information shall include: b)
 - sampling or the date, exact place, and time of 1) measurement;
 - individual(s) who performed the sampling 2) the measurement;
 - the date(s) analyses were performed; 3)
 - the individual(s) who performed the analyses; 4)
 - the analytical techniques or methods used; and
 - 6) the results of each analysis.

Signatory Requirement 11)

All applications, reports, or information submitted to the Department shall be signed and certified pursuant to N.J.A.C. 7:26-12.2(k).

Reporting Requirements

a) Planned Changes

The permittee shall give notice to the Department as soon as possible of any planned physical alterations or additions to permitted facility. The permittee shall Departmental approval, prior to implementation, for any such alteration or addition subject to Departmental regulations or the conditions of this permit, including permit modification or permit revocation and reissuance, if necessary.

b) Anticipated Noncompliance

The permittee shall give advance notice to the Department of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements. Such advance notice shall not stay the applicability of said permit requirements or the applicability of Condition 1 of this permit, nor shall it relieve the permittee from the obligation to obtain all necessary Departmental approvals of said changes prior to implementation, including permit modification, permit revocation and reissuance, or issuance of an emergency permit, when necessary.

c) Transfer of Ownership or Operational Control

- Permits issued pursuant to N.J.A.C. 7:26-12.1 seq. are not transferable directly to a new owner or operator.
- The permittee shall notify the Department at least 180 days in advance of any proposed change of ownership or operational control of a facility. The notice shall include:
 - **1**) An disclosure statement prepared by the prospective new permittee meeting the requirements of N.J.A.C. 7:26-1 et seq;
 - A written agreement between the existing permittee and the proposed new permittee containing a specific future date for transfer of permit responsibilities coverage and liabilities between them:
 - iii) A demonstration that the financial responsibility requirements of N.J.A.C. 7:26-9.10, applicable) and 9.13 will be met by the proposed new permittee.
- 3) A new owner or operator may commence operations at the facility only after the existing permit has been revoked and reissued pursuant to N.J.A.C. 7:26-12.6(c).

- 4) The Department reserves the right to terminate the existing permit for cause pursuant to N.J.A.C. 7:26-12.7.
- The permittee of records remains liable for ensuring 5) compliance with all conditions of the permit unless and until the existing permit is reissued in the name of the new owner or operator.
- Manifest Discrepancy The following reports shall also be d) submitted:
 - If a discrepancy in a manifest is discovered, the 1) permittee shall attempt to reconcile the discrepancy. Within one week, the permittee shall submit a letter report, including a copy of the manifest, to the Manifest discrepancies are differences Department. between the quantity or type of hazardous waste designated on the manifest or shipping paper, and the quantity or type of hazardous waste a facility actually receives.
 - i) Discrepancies in quantity are:
 - (A) For bulk waste, variations greater than one percent in weight, and
 - (B) For batch waste, any variation in piece count, such as a discrepancy of one drum in a truckload.
 - ii) Discrepancies in type are differences which can be discovered by inspection or waste analysis, such as waste solvent substituted for waste acid, or toxic constituents not reported on the manifest or shipping paper.
 - An unmanifested waste report shall be submitted to the Department within 15 days of receipt of unmanifested waste.

Annual Reports e)

The permittee must prepare and submit two copies of a facility annual report to the Department as per N.J.A.C. 7:26-7.6(f)2 as well as a generator's annual report per N.J.A.C. 7:26-7.4(g) by March 1 of each year, covering the previous calendar year.

f) Discharge and Other Emergency Reporting

The permittee shall report any noncompliance which may endanger human health or the environment. The following information shall be reported orally to the Department within

- 24 hours after the permittee becomes aware of the circumstances by calling (609) 292-7172.
- 1) Information concerning release of any hazardous waste that may cause an endangerment to public drinking water supplies.
- 2) Any information of a release or discharge of hazardous waste, or a fire or explosion from a hazardous waste facility which could threaten the environment or human health outside the facility.
- 3) The description of the occurrence and its cause shall include:
 - Name, address, and telephone number of the owner or operator;
 - ii) Name, address, and telephone number of the facility;
 - iii) Date, time and type of incident;
 - iv) Name and quantity of material(s) involved;
 - v) The extent of injuries, if any;
 - vi) An assessment of actual or potential hazards to the environment and human health outside the facility, where this is applicable; and
 - vii) Estimated quantity and disposition of recovered material that resulted from the incident.

A written submission shall also be provided within five days of the time the permittee becomes aware of the circumstances to the address in Section (i) of this condition. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and time, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.

g) Other Noncompliance

The permittee shall report all instances of noncompliance not reported under Section (b) or (f) of this Condition within 50 days of the time the permittee becomes aware of the noncompliance. The reports shall contain the information listed in Section (f) of this Condition.



h) Other Information

Where the permittee becomes aware that it failed to submit any relevant facts in a permit application or submitted incorrect information in a permit application or in any report to the Department, it shall promptly submit such facts or information.

i) Department Address

All reports and submittals required by this permit are to be submitted to the Department of Environmental Protection at the following address:

Department of Environmental Protection Division of Hazardous Waste Management Chief, Bureau of Hazardous Waste Engineering CN028

Trenton, New Jersey 08625

A copy shall be sent to the regional Hazardous Waste Enforcement field office.

j) <u>Tank Shell Thickness</u>

The permittee shall comply with the following for tank shell thickness:

- Submit a test plan for measuring tank shell thickness, within sixty (60) days of the effective date of this permit;
- 2) Submit again a test plan for measuring tank shell thickness, within thirty six (36) months of the effective date of this permit;
- Perform the tests for tank shell thicknesses within nine (9) months after approval of testing plans by the Department; and
- 4) Submit results of the tests for tank shell thickness within thirty (30) days after each testing date.
- 5) In the event the results of the tests for tank shell thickness indicate a shell thickness less than the minimum shell thickness specified in Condition 14a and b, the permittee shall comply with the following:
 - i. Provide immediately oral and written notification to the Department of the tank(s) failing the minimum shell thickness;

- - Remove all hazardous waste from the tank to a 11. permitted tank which meets the minimum thickness requirements;
 - iii. Refrain from adding any hazardous waste to the tank;
 - Submit a corrective plan to the Department, within days from the date of thirty (30) notification, for Department review and written approval; and
 - The company shall not use or close the tank without obtaining written approval from the Department.

k) Engineering Drawings

Upon issuance of this permit, the permittee shall comply with the procedure outlined in Conditions 12 (k) (1) and 12 (k) (2) below. Failure to comply with the aforementioned procedure shall be cause for immediate revocation of this permit;

- The permittee shall submit to the Department, by 1) certified mail or hand delivery, within thirty (30) days of the effective date of this permit, a letter signed by the permittee and a registered professional engineer stating that the facility layout and design is in compliance with the Engineering Plans and Reports (see Condition 13). This shall include the submittal of a revised set of engineering drawings outlined in Condition 13(b). These drawings shall be signed and sealed by a registered professional engineer; and
- The Department shall inspect the facility to determine 2) whether or not it is in compliance with the designs set forth in the Engineering Plans and Reports. If within 15 days of the date of submission of the letter in Condition 12 (k) (1) of this section, the permittee has not received from the Department the intent of inspect, prior inspection is waived and it is understood that the facility meets the design requirements. If the facility is not in compliance with the approved design, a schedule shall be submitted within thirty (30) days of the date of the Department's inspection outlining how the facility will be brought into compliance. schedule shall be subject to the Department's approval.

13) Referenced Engineering Plans and Reports

The permittee shall operate the facility in accordance with Title 7. Chapter 26 of the New Jersey Administrative Code and the following submissions:



- a) SRSNJ Part A and Part B permit applications for a Hazardous Waste Facility Permit, dated October 17, 1983, signed by James R. Hulm.
- b) Engineering design plans prepared by Russell L. McCorkle, P.E., dated October 13, 1983.
- c) Report covering additional information on the Part A and Part B applications dated May 21, 1984, signed by James R. Hulm.
- d) Report covering additional information on the Part A and Part B applications dated August 31, 1984, signed by James R. Hulm.
- e) Report covering additional information on the Part A and Part B applications dated July 18, 1985, signed by James R. Hulm.
- f) Report covering additional information on the Part A and Part B applications dated March 13, 1986, signed by James R. Hulm.
- g) Report covering additional information on the Part A and Part B applications dated August 11, 1986 and signed by James R. Hulm and revised engineering design plans prepared by Russell L. McCorkle, P.E., dated August 8, 1986.

14) Authorized Activity Section

a) The permittee is authorized to store hazardous waste in the following tanks at the facility.

Tank Numbers	Location	Minimum Shell thickness (inch)	Design capacity of Tank(s) in gallons
	200001000	THE TOTAL OF THE PARTY	AGIIONS
2	Recovery area	0.167	6,000
3	Recovery	0.167	6,000
4	Recovery area	0.167	6,000
5	Recovery area	0.167	6,000
6	Recovery area	0.167	6,000
7	Recovery area	0.167	6,000
8	Recovery area	0.167	10,000
9	Recovery area	0.167	10,000
10	Recovery area	0.167	10,000
11	Recovery	0.167	10,000

40	area Recovery	0.1875	18,000
	area		18 000
41	Recovery area	0.1875	18,000
		•	112,000
13	Fuel	0.167	20,000
13	blending	0.10,	
	area		
100	Fuel	0.167	10,000
	blending area		
101	Fuel	0.1875	32,000
	blending		
100	area Fuel	0.1875	32,000
102	Fuel blending	0.1873	32,000
	area		
	•		94,000
69	Custom	0.167	18,000
0)	distilla-	0.207	20,
	tion area		
70	Custom	0.1875	18,000
	distilla- tion area		
71	Custom	0.167	15,000
	distilla-		
	tion area	0.1/7	15 000
72	Custom distilla-	0.167	15,000
	tion area		
73	Custom	0.1875	18,000
	distilla-		
74	tion area Custom	0.1875	18,000
, , ,	distilla-	0.10,3	20,000
	tion area		
75 .	Custom distilla-	0.1875	18,000
	tion area		
77	Custom	0.167	17,000
•	distilla-		
80	tion area Custom	0.1875	18,000
00	distilla-	0.10/3	10,000
	tion area		
81	Custom	0.1875	18,000
	distilla-		
82	tion area Custom	0.1875	18,000
	distilla-	0.10/3	20,000
		,	

ents	Recovery	Service	of New
			,

			•
•	tion area		
83	Custom	0.1875	18,000
	distilla-		4
	tion area		40.000
84	Custom	0.1875	18,000
	distilla-		•
0.5	tion area	0 1075	10.000
85	Custom	0.1875	18,000
	distilla-		•
90	tion area Custom	0.167	17,000
90	distilla-	0.107	. 17,000
	tion area	•	
91	Custom	0.167	17,000
. ·	distilla-	0.107	17,000
	tion area		
92	Custom	0.167	17,000
	distilla-		17,000
	tion area		
93	Custom	0.167	17,000
- -	distilla-		,
	tion area		
94	Custom	0.167	17,000
	distilla-		,
•	tion area		
95	Custom	0.167	17,000
	distilla-		•
	tion area		
103	Custom	0.1875	32,000
	distilla-		•
	tion area		
104	Custom	0.1875	32,000
·	distilla-		
	tion area	•	
201	Custom	0.167	17,000
	distilla-		
•	tion area		
202	Custom	0.167	17,000
	distilla-		
	tion area		• •
203	Custom	0.167	17,000
	distilla-		
,	tion area		
	•		462,000
ውጥ ⊸1	D41-4 D14	0.167	1 000
BT-1	Pilot Plant	0.167	1,000
DT_0	Area	0.167	4 444
BT-2	Pilot Plant	0,167	1,000
DTF O	area	0.445	
BT-3	Pilot Plant	0.167	1,000
D	area		
BT-4	Pilot Plant	0.167	1,000
	area		
	•		4,000



Total existing tank storage capacity (gallons) = 672,000

b) Proposed New Tanks

The permittee is authorized to use the proposed new tanks in fuel blending area, as delineated in the referenced engineering plans and reports (Condition 13), for the storage of hazardous waste in tanks. The use of said proposed tanks in fuel blending area shall be contingent on the permittee's compliance, to the satisfaction of the Department, with the requirements of Condition 32(b) of this permit.

Tank <u>Number</u>	Minimum Shell Thickness (inch)	Design Capacity of Tank(s) in Gallons
110	0.1875	38,000
111	0.1875	38,000
112	0.1875	38,000
113	0.1875	38,000
	e e	152,000

Total tank storage capacity (gallons) = 672,000 (existing) + 152,000 (proposed) = 824,000 (total approved)

The permittee is authorized to store containerized hazardous waste in the container storage area (Building #10), as delineated in the engineering drawing #3037-1, signed by James R. Hulm, and dated August 31, 1984.

Description	Permitted Capacity				
Warehouse, Building #10	116,930 gallons of liquids (2,126 x 55 gallons containers or equivalent volume of other size containers) for recovery and				
. •	blending operations.				
Warehouse,	13,750 gallons of solids (250 x				
Building #10	55 gal. containers or equivalent volume of other size containers) for transfer to off-site authorized facilities.				

Maximum Number of Containers = 2,376
Total Container Storage Capacity (gallons) = 130,680

The permittee is authorized to transfer the solid residues content of 55 gallon metal drums to smaller plastic or fiber drums for transfer to an off-site authorized incinerator.

d) Equipment for Flash Distillation of Wastes in Recovery Area



Equipment Number	Description	<u>Use</u>
T-12	Thin film evaporator	Separation of volatile materials from the non-volatile materials.
T-14	Thin film evaporator	Separation of volatile materials from the non-volatile materials.
S-2	Jacketed flash still	Separation of the dried solvents from the calcium chloride drying agents.
T-4	Packed stripping column	Solvent removal from waste water when needed to meet aqueous discharge standards.

Equipment for Fractional Distillation of Waste in Custom Distillation Area

Equipment Number	Description	<u>Use</u>
T-20	Batch Fraction- ating Sieve Tray Column	Separation of spent solvent mixture by distillation.
T-21	Batch Fraction- ating Packed Column	Separation of spent solvent mixture by distillation.
T-22	Batch Fraction- ating Packed Column	Separation of spent solvent mixture by distillation.
Extraction	Karr c/c Liquid/ Liquid Extractor	Separation of spent solvent mixture by extraction.

Equipment for Fuel Blending of Waste in Fuel Blending Area f)

Equipment	Number	Capacity	Height	Diameter	Use
	Equipment			•	•

Tank #100 with agitator	10,000 gallons	16 ft.	12 feet	Blending of solvent mixtures for industrial fuel.
Tank #13 with agitator	20,000 gallons	24 ft., 6 inch	12 feet	Blending of solvent mix- tures for industrial fuel.

g) Pilot Plant Equipment for Distillation of Wastes in Building
No. 4

One square foot Luwa thin film evaporator.

A 2 inch diameter Karr liquid/liquid extractor.

A 6 inch diameter packed fractionating column.

15) Permitted Waste Types

a) The permittee is authorized to accept the following waste types for solvent recovery by distillation operations at the facility:

NJDEP Hazardous Waste Numbers	Description of Hazardous Waste
D001	Ignitable
D002	Liquids containing aliphatic, aromatic or chlorinated solvents and sodium hydroxide exhibiting the characteristic of corrosivity.
D003	Spent solvents containing nitrocellulose resin from lacquer processors and users. The nitrocelloluse exhibits the characteristics of reactivity.
F001	The spent halogenated solvents used in degreasing: tetrachloroethylene, trichloroethylene, methylene chloride, 1,1,1-trichloroethane, carbon tetrachloride, and the chlorinated fluorocarbons;
F002	The spent halogenated solvents: tetrachloroethylene, methylene chloride, trichloroethylene, 1,1,1-trichloroethane, chlorobenzene,

1,1,2-trichloro-1,2,2-trifluoroe-

'			

	thane; o-dichlorobenzene,
	trichlorofluoromethane.
F003	The spent non-halogenated
1003	solvents: xylene, acetone, ethyl
	acetate, ethyl benzene, ethyl
	ether, n-butyl alcohol,
	cyclohexanone;
F004	The spent non-halogenated
	solvents: cresols and cresylic
•	acid, nitrobenzene;
F005	The spent non-halogenated
1003	solvents: toluene, methyl
	ethyl ketone, carbon disulfide,
	isobutanol, pyridine;
K086	Solvents washes from cleaning tubs
•	and equipment used in the
	formulation of ink from pigments,
	driers and stabilizers containing chromium and lead.
	chromium and lead.
U002	Acetone
U009	Acrylonitrile
U019	Benzene
U031	1-Butanol
U037	Benzene, chloro-
U051	Creosote
U056	Cyclohexane
U069	Dibutyl phthalate
U070	Benzene, 1,2-dichloro-
U077	Ethane, 1,2-dichloro-
U080	Methane, dichloro-
U083	1,2-Dichloropropane
U092	Dimethylamine
U107 U108	Di-n-octyl phthalate 1,4-Diethylene dioxide
U122	Methylene oxide
U140	Isobutyl alcohol
U154	Methanol
U159	2-Butanone
U161	Methyl isobutyl ketone
U169	Nitrobenzene
U171	2-Nitropropane
U188	Pheno1
U196	Pyridine
U210	Tetrachloroethylene
U213	Tetrahydrofuran
U220	Toluene
U226	Methylchloroform
U228	Trichloroethylene -
U239	Xylene



The permittee is authorized to accept the following waste **b**) types for blending in tanks in order to produce a solvent based fuel:

NJDEP	Hazardous
Waste	Numbers

Description of Hazardous Waste

D001

Ignitable liquids

D002

aliphatic, Liquids containing sodium aromatic solvents and hydroxide from paint strippers. hydroxide compound The sodium characteristics of exhibits the corrosivity.

D003

non-halogenated solvents Spent nitrocellulose resin containing from lacquer processors and users. The nitrocellulose exhibits characteristic of reactivity.

F001

Still bottoms from the recovery of following spent halogenated solvents used in degreasing: tetrachloroethylene, trichloroethylene, methylene 1,1,1-trichloroethane. chloride, and tetrachloride, carbon chlorinated fluorocarbons;

F002

Still bottoms from the recovery of following spent halogenated tetrachloroethylene, solvents: methylene chloride, trichloroethylene, 1,1,1-trichloroethane, chlorobenzene, 1,1,2-trichloro-1,2,2-trifluoroeo-dichlorobenzene, thane. trichlorofluoromethane.

F003

non-halogenated spent xylene, acetone, ethyl solvents: ethyl ethy1 benzene, acetate, alcohol, n-butyl ether. still cyclohexanone; and the bottoms from the recovery of these solvents.

F004

non-halogenated The spent cresols and cresylic solvents: acid, nitrobenzene; and the still

X724

bottoms	from	the	recovery	of	these
solvents					

F005	The spent non-halogenated
	solvents: toluene, methyl
	ethyl ketone, carbon disulfide,
	isobutanol, pyridine; and the
	still bottoms from the recovery of
	these solvents.
K022	Distillation bottoms from the
	production of phenol/acetone.
U002	Acetone
U009	Acrylonitrile
U019	Benzene
U031	1-Butanol
U051	Creosote
U056	cyclohexane
U069	Dibutyl phthalate
U092	Dimethylamine
U107	Di-n-octyl phthalate
U108	1,4-Diethylene dioxide
U122	Methylene oxide
U140	Isobutyl alcohol
U154	Methanol
U159	2-Butanone
U161	Methyl isobutyl ketone
U169	Nitrobenzene
U171	1-Nitropropane
U188	Pheno1
U196	Pyridine
U213	Tetrahydrofuran
U220	Toluene
U239	Xylene
	ny tono
X721	Waste automotive crankcase and
,	lubricating oils from automotive
	service and gasoline stations,
	truck terminals, and garages.
•	
X722	Waste oil and bottom sludge
	generated from tank cleanouts
	from residential/commercial fuel
	oil tanks.
X723	Waste oil and bottom sludge
	generated by gasoline stations when
	gasoline and oil tanks are tested,
	cleaned, or replaced.

Waste petroleum oil generated when tank trucks or other vehicles or mobile vessels are cleaned,

including, but not limited to, oily ballast water from product transport units of boats, barges, ships or other vessels.

X725

Oil spill cleanup residue (liquids only) which: A. is contaminated beyond saturation; or B. the generator fails to demonstrate that the spilled material was not one of the listed hazardous waste oils.

X726

The following used and unused waste oils; metal working oils; turbine lubricating oils; diesel lubricating oils; and quenching oils.

X727

Waste oils from the draining, cleaning or disposal of electric transformers, excluding PCB-contaminated materials.

c) The permittee is authorized to accept the following waste types (semi-solids or solids) in containers for storage at the facility, for periods of ten (10) days or less, for transfer to disposal at off-site authorized hazardous waste facilities:

NJDEP Hazardous	
Waste Numbers	EP Toxic: Specific Containment
D004	Arsenic
D005	Barium
D006	Cadmium
D007	Chromium
D008	Lead
D009	Mercury
D010	Selenium
D011	Silver
D012	Endrin
D013	Lindane
D014	Methoxychlor
D015	Toxaphene
D017	2,4,5-TP Silvex

F007

NJDEP Hazardous Waste Numbers

Description of Hazardous Waste

Spent cyanide plating bath sludges from electroplating operations (except for precious metals electroplating spent cyanide bath sludge).

•		t	IB.EC	D.
•	.eγ	Inc.	TWL	rei

F011	Spent cyanide sludges from salt bath pot cleaning from metal treating operations (except for precious metals heat treating spent sludges from salt bath pot cleaning).
F012	Quenching waste water treatment sludges from metal heat treating operations where cyanides are used in the process (except for precious metal heat treating quenching waste water treatment sludges).
K011	Bottom sludge from the waste water stripper in the production of acyrlonitrile.
K013	Bottom sludge from the acetonitrile column in the production of acrylonitrile.
K021	Spent antimony catalyst sludge from fluoromethanes production.
K027	Centrifuge and distillation residues from toluene diisocyanate production.
K062	Spent pickle sludge from steel finishing operations.
U165	Solid naphthalene waste from chemical industry.
U238	Solid urethane waste from plastic, coatings industries.

16) Waste Analysis and Quality Assurance

- Prior to the acceptance of a waste stream for storage and treatment, the permittee shall comply with the following:
 - 1) The permittee shall obtain a completed "Hazardous Waste Sheet" (HWDS) and a representative (pre-shipment) sample from the generator. The HWDS shall contain, at a minimum, the same information as the sample form provided in the Part B application cited in Condition 13 of this permit.
 - For fuel blending as energy recovery, the permittee shall test the representative (pre-shipment) sample for BTU content, chlorine content, water content, and specific gravity.



- solvent recovery by flash distillation, 3) permittee shall test the representative (pre-shipment) sample for initial boiling point, distillation range, thermal stability, and water content, and observe the representative sample for appearance.
- For solvent recovery by fractionation distillation the 4) representative the assay permittee (pre-shipment) sample on a case by case basis for composition of spent solvents by gas chromatograph technique and test said sample for initial boiling point, distillation range and water content.
- SRSNJ Technical Representative shall review information on the HWDS and the testing results of the representative (pre-shipment) sample performed by the permittee to determine if the waste is questionable for distillation or fuel blending processing or there is an unusual mixture. If the waste stream is utilizable for blending or distillation processing and the contaminants listed or detected are permitted to be stored or treated by the facility, then SRSNJ may contract with the generator for shipment of the waste.
- Upon arrival of each waste shipment, the permittee shall 6) The representative collect a representative sample. samples for fuel blending shall be tested for the parameters listed in Condition 16(a)2 plus PCB content, the representative samples for solvent recovery by flash distillation shall be tested for the parameters listed PCB content plus 16(a)3 Condition by solvent recovery for representative samples fractionation distillation shall be tested for parameters listed in Condition 16(a)4.
- If the testing results for the representative sample for 7) the incoming shipment are consistent with the testing results of the representative (pre-shipment) sample of the waste and the HWDS, then the waste may be accepted by the permittee.
- Waste streams that arrive at SRSNJ in 55 gallon drums for **b**) processing shall be sampled by the permittee in accordance with the procedures as specified in the Part B application cited in Condition 13. The procedure includes:
 - For fuel blending, each drum of each shipment shall be 1) sampled using a Coliwasa or equivalent sampler and composited into one sample representative of the shipment.
 - For solvent recovery by distillation processing, every 2) tenth drum of each shipment shall be sampled using a

Coliwasa or equivalent sampler and composited into one sample representative of the shipment.

These composite samples shall be tested for the parameters specified in Condition 16(a)6 for the applicable intended processing.

- In the event that the representative sample from a bulk shipment yields a PCB analysis greater than fifty (50) ppm, the PCB content shall be deemed unacceptable and the permittee shall:
 - Provide oral and written notifications to the Department 1) pursuant to Condition 12(f);
 - 2) Refrain from unloading the bulk shipment; and
 - 3) Keep the loaded delivery trailer parked in a contained area until further direction is received from the Department.
- In the event that the representative sample from a drum d) shipment yields a PCB analysis greater than fifty (50) ppm, the permittee shall:
 - Provide oral and written notifications to the Department 1) pursuant to Condition 12(f);
 - 2) Refrain from processing the drum shipment;
 - 3) Collect representative samples from each drum of the shipment and analyze each sample for PCB's; and
 - 4) Hold the drums of the shipment in a container storage area authorized under Condition 14 of this permit until further direction is received from the Department.
- e) For off-site containerized solid hazardous waste accepted for transfer to off-site authorized facilities, the permittee shall obtain a completed Hazardous Waste Data Sheet from the generator of such waste and advance approval acceptibility of the waste from the intended ultimate disposal facility before accepting waste for transfer.
- f) All analyses of wastes performed by the permittee will follow the procedures described in the permit application. incoming samples will be labelled, and the label shall show customer name, material source, date, time, All incoming materials shall have a job sheet operator. prepared that lists the above information and the results of all analyses shall be recorded on it. A log book will be maintained in the laboratory in which each incoming sample is logged and the analyses recorded. A copy of the HWDS, the test results for the representative pre-shipment sample and

the test results for the representative samples of the incoming waste shipments for each waste stream shall be retained at the facility for a minimum of three (3) years. A portion (adequate for reanalysis) of the representative sample of each incoming waste shipment shall also be retained at the facility for a period extending three (3) months beyond the time that the waste shipment of which it is representative, and all products derived from it and by products produced through the processing of it, remain at the permitted facility. SRSNJ shall require the generator to update the HWDS whenever a significant change in the process that generates the waste occurs, and whenever a significant discrepancy between the HWDS of record and the analysis of an incoming shipment occurs.

- g) The permittee shall not accept any material for storage or treatment at the facility unless the material to be accepted is, in fact, a material which the facility is authorized to handle under Condition 15 of this permit.
- h) The permittee, if offered hazardous waste of a type which the facility is not authorized to handle, shall:
 - 1) Not accept the waste from the hauler;
 - 2) Instruct the hauler to contact the generator for further instructions:
 - 3) Telephone the generator, and inform the generator that the permittee is not authorized to accept the waste and that the permittee has instructed the hauler to contact the generator for further instructions;
 - 4) Confirm the telephone call to the generator, pursuant to N.J.A.C. 7:26-9.4(c)2iii, with a letter verifying the telephone conversation.
 - 5) Telephone the Department, at (201) 669-3960, and report the unauthorized waste shipment; and
 - 6) Confirm the telephone call to the Department, pursuant to N.J.A.C. 7:26-9.4(c)2v with a letter verifying the telephone conversation.
- Since the Department has recently received new guidance from the USEPA on the review of waste analysis plans, and this guidance must be implemented by the Department, Solvents Recovery Service of New Jersey's waste analysis plan will be subject to further review by the Department. If, as a result of this review, the plan is determined deficient, the Department will notify Solvents Recovery Service of New Jersey of the deficiencies and Solvents Recovery Service of New Jersey will be required to make a complete response. The revised plan will be subject to approval by the Department.

(Fi)

17) Preparedness and Prevention Plan

The permittee shall carry out the preparedness and prevention plan, as outlined in the referenced engineering plans and reports (Condition 13), in order to minimize the possibility of a fire, explosion, or any unplanned sudden or non-sudden release of hazardous wastes or hazardous waste constituents to the air, soil, surface water, or ground water which could threaten the environment or human health. The facility's emergency equipment shall include containment and cleanup supplies necessary to handle spills, fire prevention and fire fighting equipment, employee safety and emergency response equipment, and communication systems. In addition to said facility's preparedness and prevention plan, the permittee shall comply with the following:

- a) An adequate supply of absorbent compounds must be readily available within the facility to be employed if a spill should occur.
- b) All diked or bermed areas must be maintained free of cracks or gaps that could degrade their impermeability.
- c) An adequate volume of water to supply hose streams necessary in fighting ground fires during emergencies, must be available at all times.
- d) Minimum 30" aisle space must be maintained in the containerized waste storage area to allow unobstructed movement of personnel, fire protection equipment, spill control equipment, and decontamination equipment to any area in an emergency.

The emergency equipment shall be tested and maintained as necessary to assure its proper operation in time of emergency.

18) Contingency Plan

a) In the event of an emergency, a local alarm system must be activated to alert employees. The Linden Fire Department and Linden Police Department should be notified immediately. The telephone numbers are:

Linden Fire Department: (201) 486-2700 Linden Police Department: (201) 474-8500

Before assistance arrives, fire fighting equipment listed in Condition 17 should be used to control the emergency.

- b) If the facility has a fire, explosion or release of hazardous waste or hazardous waste constituents which could threaten human health or the environment, the following shall be notified immediately:
 - 1) Environmental Protection Agency

Oil and Hazardous Materials Section Raritan Depot, Edison, NJ 08817 Telephone (201) 548-8730

- 2) New Jersey Department of Environmental Protection Spill Response Unit Trenton, NJ 08625 Telephone: (609) 292-7172 (24 hours
- c) The emergency coordinator's notification to either of the above two telephone numbers must include the following information:
 - 1) Name and telephone number of the person reporting;
 - 2) Name and address of the facility;
 - 3) Time and type of incident (fire, explosion or release);
 - 4) Name and quantity of material(s) involved, to the extent known;
 - 5) The extent of injuries, if any;
 - 6) The possible hazards to human health, or the environment, outside the facility.
- d) Semi-annual drills involving all employees and appropriate local authorities shall be conducted to test emergency response capacities at the facility in accordance with the contingency plan and emergency procedures developed pursuant to N.J.A.C. 7:26-9.7.

19) Inspections

The permittee shall comply with the inspections, as outlined in Appendix F-I and F-II of the referenced engineering plans and reports (Condition 13), for equipment malfunction, structural deterioration, operator errors, spills or leakage and discharges that could cause or lead to the release of hazardous waste constituents and adversely affect the environment or threaten human health. SRSNJ shall follow the inspection schedules listed below.

a) Container Storage Area

Activity/Equipment	Inspected for	Frequency
Container placement	minimum 30" aisle, neat, stable	Daily
Container sealing	all bungs & covers	Daily
Container labeling	labels complete	Daily
Container condition	corrosion, leaks	Daily

•	Container location by type	recovery, disposal	Daily
	Housekeeping	clean, tidy	Daily
	Warning signs	legible	Daily
	Floor drains	clear	Daily
	Collecting tanks	empty	. Daily
	Emergency equipment	unobstructed	Daily
	Fire door	unobstructed	Daily
	Electrical equipment	unobstructed	Daily
ъ)	Tank Storage Area		
Act:	ivity/Equipment Inspecte	d for Frequency	
	Wall thickness	detect thinning	Annual
	Tank condition	leaks, bulges	Daily
	Housekeeping	clean, tidy	Daily
	Conservation vents	plugging	Monthly
	Flame arrestors	plugging	Monthly
•	Dike	cracks	Daily
	Base	standing water, cracks	Daily
	Warning signs	legible	Weekly
	Pipes	supported, no leaks	Daily

Valves leaks

Transfer pumps seal leaks, Weekly functional

Daily

Ladder and platforms structural Weekly defects

Tank number label visible Annual

Protective/reflective in place Weekly

coatings

c) Security

Activity/Equipment	Inspected for	Frequency
Fence	no gaps, not corroded	Weekly
Main gate	functional	Weekly
Side gate	functional, locked	Weekly

A written log of all inspections, including copies of the completed inspection checklists as provided in the referenced engineering plans and reports of Condition 13, is to be kept on-site. At a minimum, this log must include the date and time of each inspection, the name of the inspectors, a notation of the observations made, and the date and nature of any repairs or other remedial actions performed. Inspection reports may be discarded after three years. This period may be extended by written request with cause by a duly authorized official of the Department at any time.

20) Security

- a) The permittee shall prevent the unknowing entry, and minimize the possibility for the unauthorized entry, of persons or livestock onto the active portion of the facility.
- b) The permittee shall post a sign with the legend, "Danger-Unauthorized Personnel Keep Out", at each entrance to the facility, and at other locations, in sufficient numbers to be seen from any approach to the facility.
- c) Alarm, microphone and speaker systems shall all be kept activated during non-working hours to warn of fire or unauthorized entry at these times.

21) Personnel Training

The permittee shall comply with the personnel training program as specified in Part B application cited in Condition 13. The permittee shall provide facility personnel a complete program of classroom instruction or on-the-job training that teaches them to perform their duties in a way that ensures the facility's compliance with the requirements of N.J.A.C. 7:26-9.4(g).

22) Financial Requirements

a) The permittee shall maintain the liability insurance documented to the Department, or obtain and document to the Department other liability insurance, for sudden accidental occurrences. The insurance shall be maintained in accordance with the requirements of N.J.A.C. 7:26-9.13.

b) The permittee shall maintain the financial assurance for closure costs documented to the Department or obtain and document to the Department other financial assurance, as specified in N.J.A.C. 7:26-9.10, in order to provide financial assurance for facility closure. These financial mechanisms shall be maintained in accordance with the requirements of N.J.A.C. 7:26-9.10.

The permittee must adjust the facility's closure cost estimate for inflation within thirty (30) days after each anniversary of the date on which the first closure cost estimate was prepared. Whenever the current closure cost estimate increases to an amount greater than the amount of the financial mechanism, the permittee, within sixty (60) days after the increase, must either adjust the amount of the financial mechanisms to be increased so that it at least equals the current closure cost estimate and submit evidence of such increase to the Department, or obtain and document to the Department other financial assurance, as specified in N.J.A.C. 7:26-9.10, to cover the increase.

23) Closure Plan

- a) The permittee must close the facility in the manner that is stated in the application submitted by James R. Hulm, dated October 17, 1983.
- b) The permittee shall keep a copy of the closure plan and all revisions to the plan at the facility until closure is completed.
- c) The permittee shall amend the closure plan any time changes in operating plans or facility design affect the closure plan or whenever there is a change in the expected year of closure of the facility. The plan must be amended within sixty (60) days of the changes.
- d) The permittee shall notify the Department at least 180 days prior to the date the permittee expects to begin closure, except in cases where the facility's permit is terminated or if the facility is otherwise ordered by judicial decree or compliance order to cease receiving the wastes or to close. The date when the owner or operator "expects to begin closure" shall be within thirty (30) days after the date on which the owner or operator expects to receive the final volume of wastes.
- e) The permittee shall submit to the Department for approval, within thirty (30) days from the date of issuance of this permit, a written revised closure cost estimate pursuant to N.J.A.C. 7:26-9.10(e). This estimate shall include at least:
 - Closure costs based on the removal of the maximum capacity of hazardous waste storage in drums and tanks



authorized under condition 14 of this permit, pursuant to N.J.A.C. 7:26-9.10(e)1.; and the income from the sale of processed spent solvents may not be used to offset the closure cost estimate;

- 2) Disposal (Transportation/Hauling) costs broken down to show estimated distances (in miles) to the hazardous waste disposal sites:
- 3) The costs for labor and supervision listed as a separate figures and these must comply with the State of New Jersey, Department of Labor Prevailing Wage Rate Determination;
- 4) A 20% contingency cost to cover adverse weather conditions, and unanticipated spills, etc.;
- 5) Cost for equipment and supplies (e.g. detergent, flush solvents, pumps and safety equipment used by manpower) necessary for the decontamination process and removal of hazardous wastes;
- 6) Cost for heavy equipment (forklifts, trucks, etc.) together with their fuel, maintenance, operator and decontamination costs;
- 7) Current disposal cost for the maximum of 250 containers of solid hazardous waste pending transfer to off-site authorized facilities; and
- 8) Ten (10)% Administrative costs.
- In the event that the facility initiates closure prior to the completion of ground water remediation required by the New Jersey Pollutant Discharge Elimination System permit for the facility, then SRSNJ shall prepare and post-closure care plan in conformance with N.J.A.C. 7:26-9.9 to provide for continued performance of quarterly ground water monitoring and operation and maintenance of all ground water monitoring wells, the recovery well, decontamination system, including all piping and related appurtenances, and SRSNJ shall prepare and submit a post-closure care cost estimate and a post-closure care financial assurance mechanism for these ground water monitoring and remediation operations, in accordance with the requirements of N.J.A.C. 7:26-9.11. These submittals shall be made concurrent with the permittee's notification of intended closure pursuant to N.J.A.C. 7:26-9.8(g).

24) Plans Available for Inspection

One complete set of all engineering designs, submissions and plans of Condition 13, a narrative description of the operation of the facility and a facility layout drawing, this Hazardous Waste

Facility Permit and such other plans that may be required pursuant to this permit, shall be kept on-site and shall be available for inspection by representatives of the Department. The following documents shall also be maintained at the facility site:

- a) The Waste Analysis Plan outlined in Condition 16 of this permit in accordance with N.J.A.C. 7:26-9.4(b).
- b) Contingency Plan required by N.J.A.C. 7:26-9.7.
- c) Closure Plan required by N.J.A.C. 7:26-9.8.
- d) Inspection schedule required by N.J.A.C. 7:26-9.4(f).
- e) Personnel training documents and records required by N.J.A.C. 7:26-9.4(g).
- f) Written operating record required by N.J.A.C. 7:26-9.4(1).
- g) Financial documents required by Condition 22 of this permit.
- h) Tank shell thickness reports required by N.J.A.C. 7:26-10.5(b)2.

All amendments, revisions, and modifications to any plan required by this permit shall be submitted to the Bureau of Hazardous Waste Engineering for approval and permit modification, if necessary.

25) Operating Record

The permittee shall keep a written operating record at the facility in which the information in N.J.A.C. 7:26-9.4(i) shall be recorded. The information should be recorded as it becomes available and maintained until closure of the facility.

26) Posting of Notice

The notice concerning civil and criminal penalties for illegal disposal of hazardous waste must be conspicuously posted and available for all employees to read.

27) Air Pollution Control and Water Resources

- a) The permittee must obtain all necessary permits and comply with all applicable rules and regulations of the Bureau of Air Pollution Control, Title 7, Chapter 27 of the New Jersey Administrative Code.
- b) The permittee shall obtain all necessary permits and comply with all applicable rules and regulations of the Division of Water Resources, Title 7, Subtitle D of the New Jersey Administrative Code.

28) Permit Limitations

- a) The issuance of a permit does not authorize any injury to persons or property or invasion of other private rights or any infringement of applicable Federal, State, or local laws or regulations.
- b) This permit does not constitute the sole source of guidelines to be followed. Any new regulations concerning Water Quality, Air Pollution, Hazardous Waste, or other rules of the Department of Environmental Protection, applicable to the facility shall be complied with at the effective date. New regulations are effective upon publication in the New Jersey Register or as otherwise indicated in the Notice of Adoption in the New Jersey Register.

29) Early Expiration of Permit

If, for any reason, the facility ceases to be operated on a continuous basis and/or ceases to be operated by the owners or operators listed in the disclosure statement submitted by James R. Hulm, dated October 17, 1983, the permit expires of its own accord and remains ineffective until reissuance by the Department.

30) Product Specifications: Reclaimed Solvents

a) Reclaimed Solvents to be Returned to the Generator

Prior to the acceptance of any solvent waste streams for reclamation and return to the generator SRSNJ shall establish with the generator a product acceptance criteria for the reclaimed solvents. Solvent waste streams accepted for reclamation and return to the generator shall be managed as hazardous wastes until SRSNJ confirms, by analysis, that the solvent has been purified to the agreed-upon product criteria.

b) Reclaimed Solvents to be Sold

Each solvent waste stream accepted for reclamation and resale to a customer other than the original generator shall be managed as hazardous waste until said solvent has been purified by distillation confirmed by analysis to be clear, water white, and acceptably dry for the customer's intended solvent use, a sample has been submitted to the customer for his analysis, and the customer has confirmed it to be acceptable for his intended use.

31) Product Specifications: Waste-Derived Fuels

- a) Waste derived fuels produced by the permittee shall meet the specifications of the user of said fuels, provided:
 - i) The user is an installation which contains a combustion device capable of consuming said material as a usable fuel in conformance with all state and federal

environmental standards as may be applicable to the installation, and

- ii) The permittee has made the owner/operator of the recipient installation aware that the material is derived from hazardous waste, and
- iii) The owner/operator of the recipient installation possesses all requisite state and federal environmental permits or other approvals, including but not limited to all necessary hazardous waste and air pollution control permits or other approvals, as are applicable to the recipient installation, and
- iv) The material conforms to all specifications established by the state and federal environmental regulations, permits or other approvals as are applicable to the recipient installation, and
- v) Shipments of the material to such installations shall be under hazardous waste manifests.
- b) Such fuel products shall be managed as hazardous wastes by the permittee while such products remain in the permitted facility.
- c) Any disposition of the hazardous-waste-derived fuel product by the permittee other than as specified in (a) above, shall be construed as violation of the Solid Waste Management Act (N.J.A.C. 13:1E-1.1 et seq.) and shall be cause for penalties prescribed by law and for revocation of this permit.
- d) Prior to any shipments of hazardous-waste-derived fuel product from the permitted facility, the permittee shall have the material analyzed for, at a minimum, the parameters specified in Condition 16(a)2, as well as for such parameters as may be specified by the intended user. However, if it was known from the Hazardous Waste Data Sheet for the wastes which went into the blend that a constituent of concern is not present in the blend, the that constituent need not be tested for in the blend. Written records of the results of each such analysis, as well as the date and destination of each shipment of the material and confirmation of its receipt by the designated destination company, shall be maintained at the permitted facility and shall be available to the Department in accordance with Condition 9 of this permit.

32) Construction/Installation Requirements

a) The permittee shall apply to the Linden Planning Board for a Building Permit for the construction and installation of the planned four (4) new tanks. The permittee must apply for this building permit within three (3) months after the date of issuance of this Hazardous Waste Facility Permit.

b) The permittee shall follow the following construction/installation schedule; beginning on the effective data of the municipal building permit:

Time Elapsed From Effective Date of Building Permit Work to be completed Detailed engineering designs to be 3 months submitted to the Department for approval. Purchase order for equipment 6 months work completed; submitted to vendors for bid contract. 9 months Contract for equipment drawn up. 9-15 months Equipment receipt and preparation. Construction and installation to 15 months begin.

24 months Installation completed.

The permittee must submit to the Department reports of progress toward construction of work at six (6) month intervals, until the work is completed. The first report shall be due six (6) months after the effective date of this permit.

b) Upon issuance of this permit, the permittee shall comply with the procedure outlined in Conditions 32(b)1 and 32(b)2 below. Failure to comply with the aforementioned procedure shall be cause for immediate revocation of this permit.

The permittee may not commence storage of hazardous waste in the planned four (4) tanks until:

- 1) The permittee has submitted to the Department by Certified Mail or hand delivery, within thirty (30) days after the construction/installation specified in Condition 32(a) is completed, a letter signed by the permittee and a registered professional engineer stating that the four tanks have been installed in accordance with the locations shown in the Engineering Drawing No. 3037-M10, Revision 10-1, as prepared by Russell L. McCorkle, P.E., dated August 8, 1986, and engineering designs to be submitted and approved by the Department pursuant to Condition 32(a) above, and
- 2) The Department has inspected the facility to determine whether or not it is in compliance with the layout and specifications of the design plans set forth in the

engineering plans and reports. If within 15 days of the date of submission of the letter in Condition 32(b)1 of this section, the permittee has not received from the Department notice of intent to inspect, prior inspection is waived and it is understood that the facility meets the design requirements. If the facility is not in compliance with the approved design, a schedule shall be submitted within thirty (30) days of the date of the Department's inspection outlining how the facility will be brought into compliance. The schedule shall be subject to approval by the Department.

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1. EXISTING FACILITY (See instructions for definition of "ex Complete item below.)	uting" facility.	
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A. PROCESS CODE — Enter the code from the list of process codes below entering codes. If more lines are needed, enter the code(s) in the space describe the process (including its design capacity) in the space provide	w that best describes each process	to be used at the facility.
2. UNIT OF MEASURE — For each amount entered in column B(1), or measure used. Only the units of measure that are listed below shout PRO APPROPRIATE UNITS OF CESS MEASURE FOR PROCESS CODE DESIGN CAPACITY Storage: CONTAINER (barrel, drum, etc.) S01 GALLONS OR LITERS S02 GALLONS OR LITERS CUBIC YARDS OR	PROCESS Treatment:	PRO- APPROPRIATE UNITS C CESS MEASURE FOR PROCES CODE DESIGN CAPACITY
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	up to 20 gallons per hour.	- Third 200 gallons and i
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V. FACILITY DRAWING All existing facilities must include in the space provided on	page 5 a scale drawing of the facility (see if	nstructions for more detail).
VI PHOTOGRAPHS		
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IX. OWNER CERTIFICATION I certify under penalty of law that I have personally documents, and that based on my inquiry of those is submitted information is true, accurate, and comple including the possibility of fine and imprisonment.	individuals immediately responsible to	of optaining the information, i believe that the
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PAGE 4 OF 5

TANK LIST

Recovery	Area		•	
C-2	C-3	C-4	C-5	C-6

C-7 C-8 C-9 C-10 C-11

Fuel Blending Area

T-100 T-101 T-102

Column Area

T-69	T-70	T- 71	T- 72	T- 73	T- 74
T-75	T -77	T- 80	T- 81	T-82	T- 83
T-84	T-85	T- 90	T- 91	T- 92	T- 93
T-94	T-95	T-103	T-104	T-201	T-202

T-203

SOLVENTS RECOVERY SERVICE OF NEW JERSEY

Application For Permission to Operate A Hazardous Waste Treatment and Storage Facility At

Sylvan Street, Linden, New Jersey

Submitted as Required Under 40CFR 122.4 As Defined in 40 CFR 122.25 and 40 CFR Part 264

Part A

Part B





SECTION B

This section provides a general description of the hazardous waste management facility. The description is intended to acquaint the permit aplication reviewer/permit writer with an overview of the facility. More complete details can be found in other parts of this permit application.

The application is presented in such a way that the Federal Requirements for storage and New Jersey's requirements for process information are both addressed.

B-l General Description

Solvents Recovery Service of New Jersey is located within the city limits of Linden, New Jersey. The street address is : 1200 Sylvan Street, Linden, New Jersey 07036

Primary activities at the facility are the recovery of industrial solvents by distillation and extraction and the manufacture of two fuel blends. Solfueltm fuel is a proprietary product of Solvents Recovery Service of New Jersey and is manufactured against user specifications established by cement plant operations and the Department of Environmental Conversation of the State of New York. Chem-fuel Blend #5 is a proprietory product manufactured for Cadence Chemical Co to meet the particular needs and specifications of the industrial furnaces in which it is used.

The plant also serves as a transfer station for the movement of solid waste from small generators to secure disposal facilities. This is reflected in the materials listed as being handled on site in the Part A application currently on file. Since these drums are not opened on site and since they are held no longer than 10 days there is no specific provision made for their on-site analysis, storage and handling.

No disposal of hazardous waste takes place on site.

Solvents Recovery Service of New Jersey's activities fall primarily under SIC Code 7399 as "solvents recovery service as a contract basis". The industries served by SRSNJ are generally in SIC Division D under Major Groups 23,25,26,27,-28,29,30,31,34,35,36,38.

SRSNJ's relationship to the majority of their customers is that of toll processer. Title to all major recycle streams in the custom processing area of the plant, batch, continuous, azeotropic, extractive and fractional distillation liquid/liquid countercurrent solvent extraction, remains with the generator. Processes and the particular configuration of equipment and controls are researched and developed on a customer by customer basis. Each product stream is covered by some form of contract which will typically cover production rates and yields, availability of equipment, mutual confidentiality and penalties for nonperformance. Each shipment of customer's material is analyzed to determine available recovery and is recorded as a received batch. All material recycled in the custom processing area is considered as batch toll recovery.



Material processed in the flash distillation area of the plant is identified by customer and is processed to that customers account. A record of the amount of solvent recovered for each customer and the amount of residue that must be blended in the fuel blending program is kept. The customer is charged separately for recovered solvent on a delivered gallon basis and for residue on a unit cost and percentage of recovery basis. The higher the yield of recovered solvent, the lower the customer's overall cost. This type of toll recovery is non batch.

Fuels for industrial furnaces, Solfueltm and Chem-Fueltm fuels, are blended from recovery residues and from those solvents that have valuable heat content but that cannot be separated efficiently or are of so low an intrinsic value that their separation is not economical.

The contact and person responsibile for hazardous waste management activities is:

Ulisse F. Marini, Production Manager

B-2 Topographic Map

Appendix B-I is a topographic map prepared by Sailer and Sailer to a scale of 1":100'.

The map covers an area and is centered on the facility location. Contour lines are shown at 2' intervals.

The maps show that the facility is essentially flat falling entirely between the 22 and 24 foot contour lines. Surface drainage is generally towards Kings Creek.

B-2a Flood Plain Map

Appendix B-II contains maps prepared by the Department of Housing and Urban Development, Federal Insurance Administration. The two maps included are the Map Index, City of Linden, New Jersey community number 340467A and that region of the City of Linden in which the facility is located described as Flood Hazard Boundary Map H-05 effective date November 24, 1976.

B-2b Surrounding Land Use

Appendix B-III is a plot plan of the plant site. Sylvan Street and the plant location are identified on a key map as being within zone H-1, Heavy Industrial. The plant is bounded at the north by a railroad spur and the Linden Municipal Airport, to the West by a metal fabricating plant and an industrial warehouse, to the South and East by Conrail railroad tracks, a drum manufacturer and a motor freight terminal.

B-2c Wind Direction

Appendix B-IV is a compilation of data provided by the U.S. Weather Bureau at Newark Airport. The data shows that the prevailing winds are predominantly from the North during the winter and the Southwest during the summer. However, the variation is slight.



B-2d Access Control

The plant plot plan, Appendix B-III, shows the location of a perimeter fence with gates on the East fence to Sylvan Street, the West fence to unimproved land and the North fence to a leased railroad siding which is currently not in use. The plant is manned and operated 168 hours a week. Security is further discussed in Section F.

B-2e Wells On and Off-site

SRSNJ has no withdrawal or injection wells either on-site or off-site. The closest recorded well is at the Linden Airport 2000' from the plant boundary. Appendix B-V includes a letter from the Bureau of Geology and Topology of the New Jersey Department of Environmental Protection and a listing of wells within 1 mile of the plant site. None fall within 1000' of the plant site.

B-2f Plant Plot Plan

The plant plot plan at Appendix B-III shows the location of all buildings and structures on site. Operating areas in which loading and unloading take place, emergency and fire fighting equipment locations, dikes and run-off control and hazardous waste handling and storage areas are all identified.

Run off from the tank farms is contained within the tank farm dikes. Each bulk storage area is separately contained. Any precipitation that collects within the dikes is checked before release to the Linden Roselle Sewerage Authority Plant.



Storage of drummed liquid hazardous waste is in building #10. Precipitation falling on the warehouse runs into a storm drain discharging to Kings Creek along with precipitation from the plant parking lots and landscaped areas. Location of this drainage system is shown on the drainage plan in Appendix B-VI

Underground drain lines connect the custom processing area and tank farm to a plant sewer line. This line also picks up effluent from the flash distillation area and sanitary sewerage from the office, laboratory and locker rooms. The line runs beneath Sylvan Street and passes through a manhole outside the plant administration building. A flow measurement recorder, PH recorder and continuous sampler monitor the quantity and quality of the plant effluent 24 hours a day. The plant discharges to the Linden Roselle Sewerage Authority Plant on Wood Ave in Linden. An application for an NJPDES Permit has been filed with the New Jersey Department of Environmental Protection.

B-3 Location Information

B-3a Seismic Standard

Union County, New Jersey is not listed in Appendix VI of Part 264. The site is therefore presumed to be in compliance with 264.18a

B-3b As noted on the attached map in Appendix III, SRSNJ's plant does not lie within the 100 year flood plain.

B-4 Traffic Pattern

Access to the plant site is shown on the Topographic Map, Appendix B-I. Traffic movement within the plant is as shown on the plot plan, Appendix B-III.

The plant is located approximately 500' from US 1, a major highway. Sylvan Street runs approximately 500' in an easterly direction from Route 1 to the plant gate. Sylvan Street was built and has been maintained by the City of Linden to provide adequate load bearing capacity for traffic to and from SRSNJ's plant. Sylvan Street lies entirely within Linden's industrial zone.

The plant, at capacity, can process approximately 40 receipts of used solvent per week and make as many shipments. The plot plan shows the plant roads and identifies the off-road loading and unloading points, the recovery, used solvent and product tank farms and Buildings #10 and #11 for used solvent storage and product storage. An additional loop around the custom distillation area leads to and from the loading/unloading area for this area.

The construction of plant roads and loading/unloading areas varies from reinforced concrete aprons to 30" of trap rock topped by oil and stone to asphalt over 12" of gravel fill. The roads have been in use for periods up to 30 years and have demonstrated their ability to bear the 80,000 pound weight of loaded tank wagons.

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DATA COMPILED FROM U. S. MEATHER BUREAU NEWARK AIRPORT, NEW JERSEY (10 YEAR PERIOD)

SECTION C

WASTE CHARACTERISTICS

This section describes the chemical and physical nature of the material stored and processed at Solvents Recovery Service of New Jersey. The Waste Analysis Plan describes the sampling, testing and evaluating necessary to ensure its safe and efficient handling.

C-l Chemical and Physical Characteristics

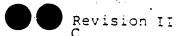
Solvents Recovery Service of New Jersey operates as a Hazardous Waste Treatment and Storage Facility.

The criteria by which any waste is characterized as hazardous are Extraction Procedure (EP) Toxicity, Ignitability, Corrosivity and Reactivity. Data from the generators of material processed by SRSNJ, and information obtained by tests and analysis conducted on site, are used to ensure safe and efficient operation of the plant. This information is also needed to ensure that material leaving the plant and its ultimate disposition present no threat to health or the environment.

The materials stored and treated are primarily contaminated solvents, many of which are highly flammable and all of which can induce adverse effects on over exposure. The common denominators of flammablility and toxicity have been recognized in the design and operation of all areas of the plant.

Incoming materials fall into four general categories:

a. Solvents used in the chemical or pharmaceutical process industries that are recovered by fractional distillation and/or extraction procedures and are returned to the generator. These are processed in the custom distillation area of the plant.



- b. Solvents used in a variety of industries that are recovered by flash distillation and which can be returned to the generator. These are processed in the Recovery Area of the plant.
 - c. Used solvents for fuel blending.
- d. Solid Hazardous waste for transfer to licensed disposal sites.

The plant ensures that adequate information needed to receive, store and treat each of these general categories safely and in accordance with NJAC 7:26-9.1 et seq and NJAC 7:26-10.1 et seq is obtained both from the generator and from internal observation and test.

a. Solvents Processed in the Custom Distillation

Solvents Recovery Service owns and operates sophisticated distillation and extraction equipment and extraction equipment and markets its expertise in the use of this equipment. Their customers are those who wish to buy this distillation or extraction service rather than invest in the purchase of their own facilties and the training of their personnel.

The following are representative of the customers purchasing this service and the solvents processed.

The solvent divethylformamide (DMF) is used in the manufacture of synthetic leather. The cost of DMF is a major part of the total production cost; the quality of the finished product depends in part on the quality of the solvent used. SRS can recycle DMF for the manufacturer at a fraction of the cost of purchasing prime solvent and can allow the manufacturer to put to more efficient use the capital he would otherwise have to invest in distillation equipment were he to recover the DMF himself.

Many pharmaceutical processes use solvents to extract active components from fermentation media, or to purify intermediates or end products by recrystallization. These pro-



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cesses would not be economical if the solvent used could not be recycled.

Used solvent delivered to SRS for custom distillation is stored in the tanks in the custom distillation tank farm. This is diagrammed in Appendix D-IV. The total capacity of these tanks is 461,000 gallons. Each tank is equipped to handle flammable material and may be used interchangeably for used solvent, intermediates or certain recovered solvents.

Before negotiating a contract for custom processing, SRS and the customer will establish specifications for both the used and recovered solvents and will determine what an acceptable yield of recovered solvent might be. The "yield" is that amount of solvent contained in the used stream that is returned to the user, usually expressed as a percentage. All incoming material is analyzed, usually by gas chromatograph, to ensure that the used solovent received conforms to agreed on specifications. Data from this analysis is used to calculate yield data and to confirm that SRS is performing its part of the contract. The analysis and calculations are all recorded and are a part of the confidential business record of the Company.

b. Solvents Processed in the Recovery Area

In general, the used solvents which the plant processes in the Recovery Area have been classified by the EPA as Hazardous Wastes from specific and non-specific sources, the F and the K Series. The plant also handles solvents from other sources listed under the U series. These are covered in the Part A of this Application. In addition, there are a number of solvents that are not listed wastes but do have the characteristic of ignitability; an example would be butyl acetate. Were this to be the principal component of a used solvent stream, the classification used would be D 001.

Appendix C-I, headed "Waste Characteristics" lists under broad categories the industries that use solvents in certain

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applications. For each application, the primary recoverable solvent is listed together with its flash point, upper and lower explosive limits and Threshold Limit Values published by the American Conference of Industrial Hygienists. TLV's are the concentrations of solvent vapor in the air in the work place that are recognized as safe.

The table of data also includes the primary potential contaminants anticipated in each used solvent stream. flash distillation process used in the recovery area is designed to separate the volatile solvent component from a non-volatile residue. In fact, a small amount of solvent is left in the residue, the still bottoms, to ensure that it remains fluid and flammable. Used solvents processed in this area of the plant are processed by batch, each batch coming from a single customer. Recovered solvent is returned to the generator, still bottoms are pumped to the fuel processing area. The yield obtained on each batch varies depending upon the degree of contamination and this is reflected in the price the customer pays for the service. Typically, each solvent user will have his own type or blend of solvents and expects to have them returned. The relationship between user and recycler is an on-going one in which essentially the same material is processed batch after batch. The same processing conditions established at the time the user first became a customer are followed. Each batch processed is sampled, observed and tested. The observation is made to ensure that no excess sediment is present. The sample is tested to ensure that the batch can be processed safely. A portion of the sample is retained to resolve any contaminant complaint from the customer and, if requested by the customer to confirm the plant yield. Used solvents to be processed through the recovery area are stored in drums in Building #10 which has the capacity to hold 2,240 drums or in the used solvent tank farm with a capacity of 76,000 gallons.

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c. Used Solvent for Fuel Blending

Certain solvents are not economically recoverable in their prime form. These are typically solvents of low intrinsic value, methanol for example, those where the user's specifications are unattainable, or where the mixture cannot be efficiently separated because of the formation of azeotropes or overlapping or close boiling ranges. However, when properly blended and processed, these solvents can be a beneficial source of energy.

SRS is equipped to process non-recoverable solvent mixtures with their still bottoms to produce valuable solvent based fuels. Specifications for two such fuels are attached at Appendix C-IV, one for SolFuel manufactured to meet specifications established in conjunction with the New York Department of Environmental Conservation and which has been burned successfully in cement and aggregate kilns. The other is Chem-Fuel manufactured using a process developed by Cadence Chemical Resources Inc. for use in blast furnaces.

In each of these end use applications, classified as Industrial Furnaces, the combustion conditions are orders of magnitude more destructive than those specified in Sub-Part O incinerators and in each application emission controls are in place and covered by existing regulations. Specifications are restrictive only for PCB's, herbicides, pesticides etc. and for such other materials that might adversely affect the operation of the unit or the properties of the finished product.

Solvent based fuels are blended and stored in Tanks T-100, T-101 and T-102 shown on drawings SRS-PS-001 attached at Appendix D-III. Their capacities total 70,000 gallons.

d. <u>Solid Hazardous Waste for Transfer to Secure</u> <u>Landfills</u>

Approximately 2% of the used solvent drums will contain residues that cannot be removed from the drum or, because they are solid, cannot be processed for fuel or recovery. The

heads of these drums are removed and the contents repacked for shipment as solid drums. They are then shipped to a licensed secure chemical landfill. SRSNJ also serves as a transfer station for the accumulation of truckload shipments of solid hazardous waste shipped to the same location. Drums in transfer are not opened on site. The number of these drums on site will not exceed 250.

As noted above and in the General Facility Description all waste materials entering the site leave as:

- . Recycled solvent returned for reuse
- . Solvent blend fuel
- . Solid drums.

Both the plant's operating capabilities and the final disposition of material brought on site are taken into account in evaluating the hazardous nature of the waste processed. In this context, the primary criteria are considered as follows:

D 001 - Ignitability

With the exception of the chlorinated solvents, all other solvents handled are at least combustible, many being highly flammable. This has been taken into account in the design of the facility by providing appropriate warnings, adopting all the relevant fire codes in construction and providing fire fighting resources. All liquid wastes are accepted on the basis that they test as Ignitable.

D 002 - Corrosivity

As noted in the Waste Analysis Plan, generators are required to submit a detailed analysis of their waste stream. In general, any that are reported as corrosive on the SRS Hazardous Waste Data Sheet are not accepted for processing. However, a common ingredient in paint strippers is sodium hydroxide. A ph measurement of a used paint stripper will frequently snow a reading in excess of 12.5. This meets the criteria of corro-

SECTION E

GROUNDWATER MONITORING

Groundwater monitoring wells have been installed at the locations shown on the Site Plan in Appendix B III.

Test boring logs are included in Appendix E I. Wells B-1, B-2 and B-3 were installed in August 1979. Well points were installed in each at a depth of 26'6", no record was made of screening.

Wells B-4 through B-8 were installed between February 1981 and August 1982. Detailed boring logs showing screen depth were prepared and are included.

The wells have been sampled and the information developed from the samples reported to the NJDEP, Department of Water Resources. The plant is operating under an Administrative Consent Order. At this time, a routine sampling schedule has not been established.

Surface run-off from the plant parking areas is collected and discharged through the storm drain in the south west corner of the plant. This is the subject of an application for a waiver from NJPDES registration. Samples of surface run-off are taken at a catch basin at the north west corner of the office building.

Copies of SRSNJ's application for a discharge permit and for a waiver for surface drainage are included in Appendix E-II.

Revisor

SECTION G

CONTINGENCY PLAN

The information contained herein is submitted in accordance with the requirements for a Contingency Plan as contained in 40CFR 122.25(a)(7) and 264 Subpart D.

The intent of CFR 264 Subpart D is to ensure that facilities that treat, store or dispose of Hazardous Waste have established the necessary planned procedures to follow in the event an emergency situation should arise.

G-l General Information

This contingency plan is for the Solvents Recovery Service of New Jersey plant located on Sylvan Street in Linden, New Jersey 07036. SRSNJ is a solvent recycler that processes used solvents. Recovered solvents are returned to the generators, the residues from recovery are blended to produce a solvent based Solfueltm that is used as a source of heat in the manufacture of cement. The plant is owned and operated by SRS, Inc. The Plant Manager is Mr. Ulisse F. Marini who is also the primary emergency coordinator at the facility.

SRSNJ stores used and recovered solvents on site in drums and bulk storage tanks. Drums are stored in the two warehouses identified on the attached plot plan which also shows the location of the three bulk storage areas. These areas are:



Used Solvent Warehouse

Capacity 2240 drums. Access from 3 sides. Equipped with high expansion foam system. Automatic release tied to Linden Fire Department.

Finished Product Warehouse

Capacity 500 drums. Also used for calcium chloride drying operation. Access from West. Also equipped with high expansion foam.

Used Solvent Tank Farm

Total capacity 146,000 gallons. 10 Cone bottom tanks supported on concrete encased steel structures. One Solfueltm fuel blend tank and two agitated storage tanks.

Finished Product Tank Farm

17 stainless steel tanks holding 105,000 gallons. Fire protection by monitor nozzle located on steel structure to East and hand held foam station to the West.

Custom Distillation Tank Farm

35 tanks holding a total volume of 546,000 gallons. This includes tank #60 holding 14,000 gallons of 40% caustic potash and tanks #80 and #201 holding aqueous effluent and runoff for pretreatment before discharge.

A general site plan and a description of the facility are included in Section B of this permit application. A description

Revision I

SECTION I

CLOSURE PLAN

FINANCIAL REQUIREMENTS

I-l Closure Plan

The closure plan describes the steps Solvents Recovery Service of New Jersey will take when they decide to shutdown their Hazardous Waste Facility in Linden. Since this is not a disposal facility no post-closure plan will be required.

SRSNJ will keep a copy of the approved closure plan on site together with any revisions until certification of closure completeness has been submitted and accepted by EPA Region II. SRSNJ will notify the Regional Administrator at least 180 days prior to the start of closure.

Under the regulations SRSNJ is required to establish a closure date for the facility. SRSNJ does not anticipate closure at any time in the foreseeable future, however, in compliance with 264.111, an arbitrary date of 2013 is set.

I-la Closure Performance Standard

This closure plan has been designed to remove all hazardous material from the site, to ensure that the facility will not require further maintenance and controls, and to eliminate threats to human health and the environment.



If there is any evidence of spills or leaks samples will be taken and analyzed to determine the nature and degree of contamination and appropriate remediation steps established.

No estimate is made for partial closure since, as a treatment facility rather than a disposal facility, the concept of partial closure is inapt.

The closure plan may be amended whenever amended operating plans or design are approved.

I-lb Maximum Waste Inventory

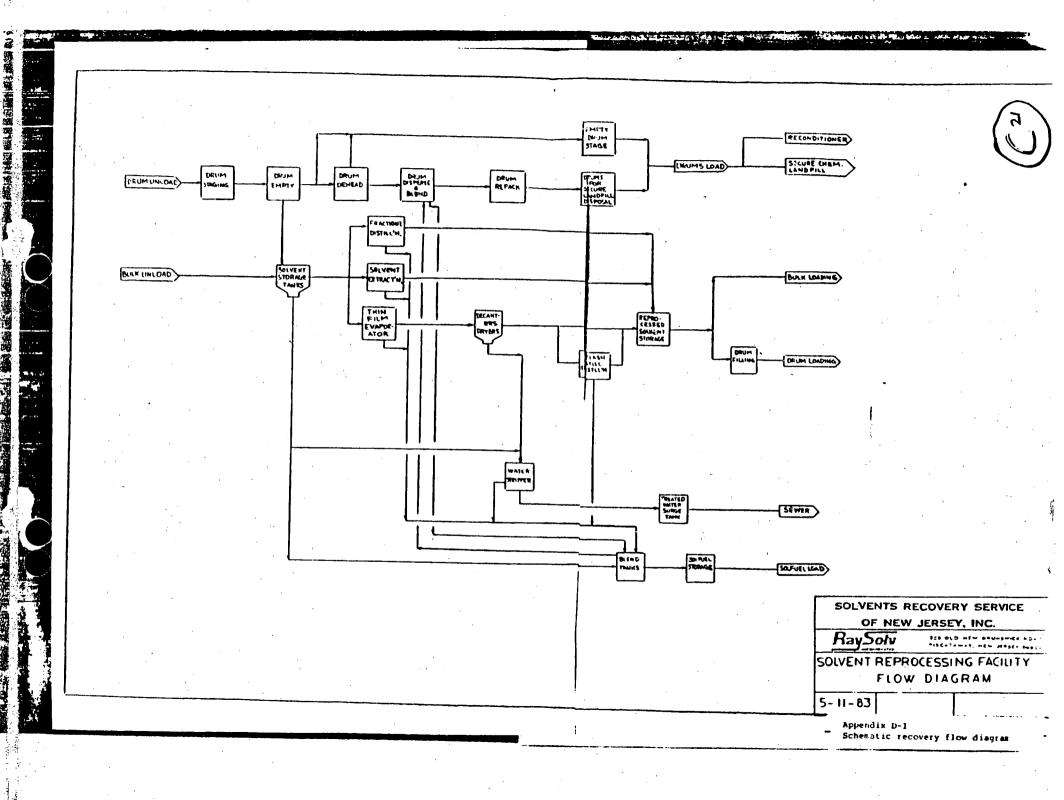
The maximum amount of hazardous waste that is to be stored on site is broken down as follows:

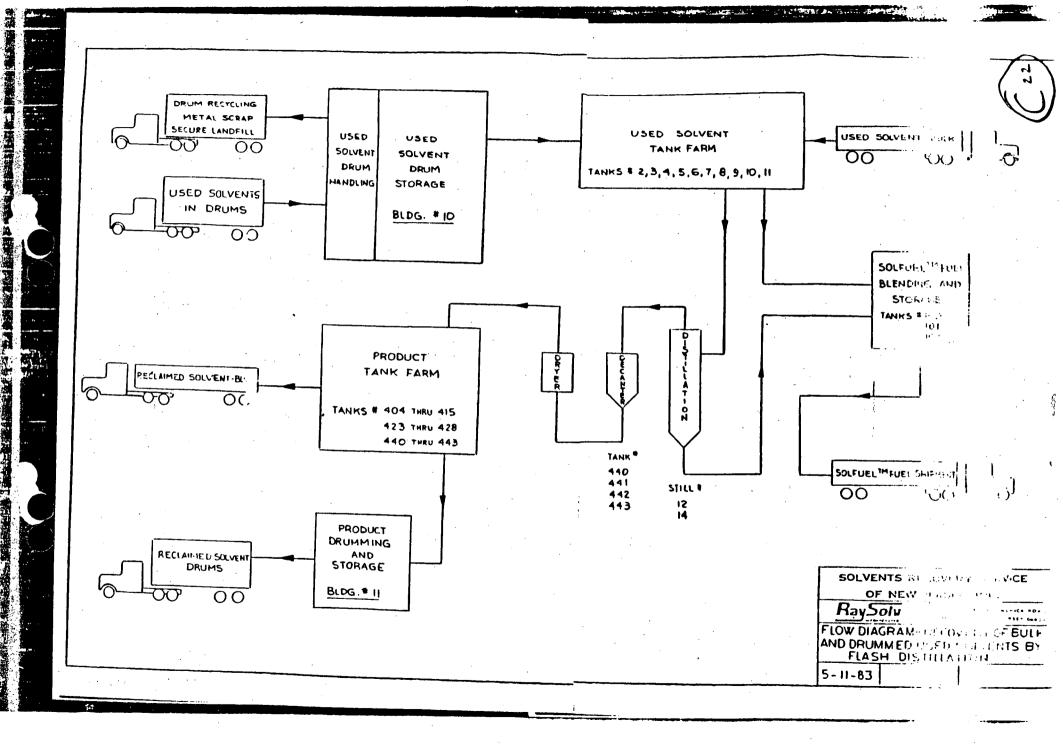
Drummed waste 2000 drums 110,000 gallons Solid waste 240 drums Custom Distillation Tank Farm 35 Tanks 546,000 gallons Recovery Tank Farm 10 tanks 76,000 gallons Solfueltm Storage 3 tanks 70,000 gallons

I-lc Disposal and Decontamination

I-lc(1) Closure of Containers

The maximum inventory of used solvent in drums will be 110,000 gallons in 2000 drums. The contents of each will be known and a recycling process established. The drums can be processed within 30 days. Of the 110,000 gallons approximately







SOLVENTS RECOVERY SERVICE OF NEW JERSEY, INC.

1200 SYLVAN STREET : LINDEN, N. J. 07036

PHONE: (201) 862-2000

July 18, 1985

Mr. Frank Coolick, Chief Bureau of Hazardous Waste Dept of Environmental Protection 32 E. Hanover Street Trenton, NJ 08625

Re: Review of Information of NJDEP Part A and Part B Applications for Solvents Recovery Service of New Jersey (SRS) as a Hazardous Waste Storage, Treatment and Transfer Facility, Linden, Union County, EPA ID No. NJD 002 182 897, NJ Facility No. 2009C

Dear Mr. Coolick:

Your letter of May 7th which we received on May 10th describes the information we have provided as inadequate. You ask for clarification in three areas:

- Product specification
- 2. Analysis Plan
- 3. Description of waste types and treatments.

Product Specification:

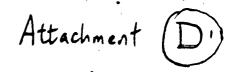
The Department has requested detailed specifications covering maximum or minimum limits of each significant parameter for each marketable product produced from the treatment of liquid hazardous wastes in the solvent recovery area, custom distillation area and fuel blending area at our plant.

Before addressing the request, it might be appropriate to describe the nature of our operation, our relationship with our customers and the general character of the materials we process and produce.

The discussion breaks down best into the three operating areas listed, recovery, toll fractionation and fuel blending.

A. Recovery

The flash distillation equipment is used to process solvents and mixtures used in a wide variety of manufacturing industries. Without detailed listing of each customer it's safe to say that over 95% of the used solvents processed are returned to the generator. Each generator develops his own formulation for his solvent application.



Mr. Frank Coolick July 18, 1985 Page 2

For example, he may use a wash solvent containing toluene and ethyl acetate, a lacquer remover could contain xylene, acetone and butyl acetate. The coating systems he's working with may contribute other solvents to the mixture.

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His concern is that his material is returned to him as a clear liquid and depending on his application, a limit on the amount of water present. This means that as far as the generator is concerned, the only parameters he considers "significant" are subjective evaluations of clarity and dryness. On occasions an analytical determination of water content will be made. But in general the operating experience built up in processing each customer's material, as an identified and segregated batch for him, taken with data obtained in testing his crude material, satisfies his needs.

On occasion, the user of a particular solvent will not be interested in the return of his recovered material. When SRS acquires a used solvent of this type, we make the decision whether to recover and resell the solvent or blend the used solvent into a solvent based fuel or manufacture a product used in blast furnaces. The solvents recovered in this operation are segregated as product and offered for sale. In each case, a sample of the recovered material is offered to prospective purchasers together with our description such as "toluol/MEK wash" or "recovered acetone" and an assay. The customer will determine whether or not that batch meets his requirements. In this case, the significant parameter that we supply to the customer, the assay, is batch specific and does not reflect any "standard" quality of production.

B. Toll Fractionation:

The typical customer we serve in the toll fractionation area uses a solvent or solvents in some discrete step of his manufacturing operation. He could use them, for example, for extraction. Penicillin produced by mycelia in a fermenter can be dissolved preferentially in a solvent and then recovered from the solvent. The solvent is purified and reused. The customer will make a decision on whether to purify the solvent himself or have it done for him as a service. The decision is usually an investment decision of the make - or - buy type. There are many manufacturing operations that use recyclable solvents where these decisions are made.

Mr. Frank Coolick July 18, 1985 Page 3

> The manufacturer interested in establishing such a relationship with a toll processor will enter into negotiations based on the quality of the used solvent, his specifications for reuse, his batch size and production rate.

> The negotiating process starts with the submittal of a representative sample of whatever solvent or mixture is under discussion. Along with the solvent the generator will provide his assay and analysis. This sample is then analyzed by SRS to confirm the analytical procedures being used by both parties and establish a base for development. Based on the composition of the sample and the customer's expectations for a recovered product a number of distillation or recovery processes are reviewed and a development program initiated in SRS's laboratory to investigate optimum available recovery rates and product specifications.

Once a process has been designed and the production of an acceptable product demonstrated in the laboratory, SRS will prepare a quotation and/or a draft contract. SRS and the generator will agree upon the nature of the used solvent stream, the yield and purity that can be achieved and the price the generator will pay.

C. Fuel Blending:

SRS was a pioneer in the development of the concept of solvent based fuels used in industrial furnaces. Long before RCRA was promulgated and the adverse impacts of improper land disposal recognized, SRS had determined to find an alternate disposal or use route for their solvent recovery still bottoms. Their confidence in the technical and economic viability of such fuel programs has been more than justified by the reports of successful operation of cement, lime and aggregate kilns and blast furnaces prepared by or for the EPA in Cincinnati.

Solvent based fuels have been used as fuel in a number of applications replacing coal and oil and as a source of raw material in blast furnaces. The development program that led to this successful conclusion started out necessarily with a definition of the user's demands and the tolerance of his process for deviations. For example, the limestone used in making cement varies from quarry to quarry. One difference frequently noted is the alkalinity of the quarry, so much so that it has been common practice to feed

calcium chloride to some kilns to compensate for these differences. Chlorinated hydrocarbons in the solvent based fuel have the same effect in the kiln. Obviously there is also a minimum level for the heat value that must be contributed by the solvent based fuel; though this will vary depending on the nature of the prime fuel in the kiln, for example, high or low volatile coal, oil or petroleum coke.

The operation of blast furnaces has been shown to be considerably improved by the use of solvent based feed-stock. This fact is recognized in US Pat.# 4443251. A blast furnace is in effect a large reaction vessel in which the reduction of iron ore to iron takes place, a reaction whose rate is enhanced by the addition of certain materials such as those in used solvent and still bottom blends. Again, the specification of acceptable material falls out of an analysis of the performance characteristics required.

In committing to be a supplier of solvent based fuel to a cement plant or raw material to a blast furnace, SRS agrees to manufacture a product meeting the user's expectations. In presenting SRS's abilities to a potential customer, SRS will describe their ability to supply a product meeting a number of preliminary criteria or specifications. Typically, the product we offer will:

- . Meet agreed upon minimum heat value
- Be homogeneous and pumpable
- Contain chlorine either within an agreed range or below an agreed maximum level
- . Contain no PCB, dioxin, pesticide or herbicide

In view of the customer specific, service oriented nature of our business we are at a loss as to how to respond to your request for detailed specifications. We must assume that the acceptance of a recycled solvent by a generator is de facto acknowledgement that it meets his specification. We must assume that the purchaser of a batch of resale solvent forms his own educated opinion of the value of the material we offer based on his evaluation of a submitted sample — and that he then confirms that our deliveries are consistent with his expectations. We must accept the responsibility of supplying a

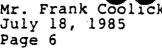
solvent based fuel that does what the customer wants, regardless of our own material availabilities; our own "specification" can only be limits and must be related to costs.

2. Analysis Plan

The analysis plan followed by SRSNJ has been designed to meet the requirements of NJAC 7:26-9.4(b) and 40 CFR 264.13.

Following are the step-by-step procedures to determine the nature of materials processed on-site and to confirm their acceptability.

- A.(i) Before committing to process any used solvent SRSNJ requires that the generator fill out and sign a Hazardous Waste Data Sheet (HWDS) and submit a representative sample of his used solvent stream. A sample copy of the HWDS is encluded in the application at Appendix C.(iii).
 - (ii) A technically qualified SRSNJ employee will review the HWDS to determine what laboratory procedures shall be followed.
 - (iii) Samples of material to be blended into solvent based fuel or blast furnace feedstock are tested for: BTU content, chlorine content, water content and PCB content.
 - (iv) Samples of material for recovery by flash distillation are tested and observed for: appearance, initial boiling point, distillation range, thermal stability, water content, and PCB content.
 - (v) Samples of material for fractionation in the custom distillation area are assayed to confirm the generator's analysis and are processed in the laboratory on a case by case basis to evaluate optimum yield and quality parameters.
- B. Having determined from the HWDS and the representative sample analysis that the generator's material can be accepted and processed, SRSNJ will inform the customer that material as described in the HWDS and represented by the sample can be shipped to the facility.



- All material shipped in for fuel blending shall be C.(i) sampled and tested as described in 2.A(iii). Bulk shipments will be sampled by a core sampler and tested before unloading. Drum shipments will be sampled by taking a sample from each drum and compositing by customer stream. Drums will not be processed until test results have been reported.
 - Material shipped in for recovery by flash distil-(ii) lation will be sampled and tested as described in Bulk shipments may be unloaded into a segregated tank and held. All test results will be reviewed before processing.
 - (iii) All material shipped in for custom distillation will be analyzed to confirm crude assay as specified in customer's purchase agreement.
- D. In the event that test results indicate that material received is not as described in the HWDS or does not match the representative sample in significant parameters (permit limits) the shipment will be rejected. The procedure followed is determined by the nature of the shipment.
 - (i) a Bulk shipment will not be unloaded.
 - The transporter will be instructed to contact the b generator for further instructions.
 - Telephone the generator to inform him that SRSNJ C is not authorized to accept delivery and require him to instruct the transporter on disposition.
 - Confirm the telephone call to the generator with đ a letter.
 - Telephone the NJDEP and report the unauthorized shipment.
 - Confirm the telephone call to the NJDEP with a f letter within seven days of detecting the unauthorized shipment pursuant to NJAC 7:26-9.4(c) 2iii and 12.4(a) 17.
 - Drum shipments will be unloaded before analysis ii (a) and will be tested before processing. Drum ship-

ments that fail to meet HWDS descriptions or are not as represented by the preshipment sample will be segregated. SRSNJ acknowledges that material so segregated may be stored in violation of permit conditions.

- (b) A telephone call, confirmed by a letter, will be made to the generator advising him of the nature of the discrepancy.
- A telephone call, confirmed by a letter, will be made to the NJDEP advising the DEP of the violation and soliciting the DEP's direction. In no event will SRSNJ ship hazardous waste to an unpermitted facility.
- E. All analyses of wastes performed by SRSNJ will be performed in accordance with the procedures described in their Part B application, PCB's will be assayed by gas chromatography.

Test results obtained on preshipment samples and all incoming waste stream samples together with each Hazardous Waste Data Sheet will be retained at the facility for 3 years.

A portion of each shipment sample (adequate for reanalysis) will be retained at the facility until three months after the shipment it represents has been processed and all products and residues resulting from its processing have been shipped offsite.

F. SRSNJ will not accept any material defined or described in Subchapter 8 of NJAC 7:26 for storage or treatment at the facility unless the material to be accepted is, in fact, a material which the facility is authorized to handle under this permit.

HW #	Hazard Code	Hazardous Constituent	Physical State	Source Industries
D001	I	Flash Point 140°F Flash Point 140°F	Solid Liquid	Used liquids or solids not listed in Subpart B meeting criterion of ignitability
D002	С	ph 12	Liquid	Paint strippers, cleaning solutions
D003	R	Nitrocellulose	Liquid	Lacquer processors and users
D004	T	Arsenic	Solid	
D005	T	Barium	Solid	
D006	T	Cadmium	Solid	
D007	T	Chromium	Solid	Solid material discarded in drums
D008	r	Lead	Solid	by processors or users, includes
D009	T	Mercury	Solid	spills, cleanups and residues
D010	T	Selenium	Solid	
D011	T	Silver	Solid	
D012	T	Endrin	Solid	
D013	T	Lindane	Solid	
D014	T	Methoxy Chlor	Solid	
D015	T	Toxaphene	Solid	
D017	T	Silvex	Solid	
F001	T		Liquid Solid	Solvents and solvent residues from degreasing operations
F002	T		Liquid Solid	Solvents used in metal cleaning, chemical processing and coating applications
F003	I		Liquid Solid	Solvents used in coatings applications, chemical processing and cleaning
F004	Т		Liquid	Solvents used in chemical processing
F005	I T		Liquid	Solvents used in coatings applica-
			Solid	tions Chemical processing and cleaning

HW #	Hazard Code Hazardous Constituent				
F007	RT	Spent cyanide solutions	Liquid	Plating bath solutions	
F011	RT	Spent cyanide solutions	Liquid	Pot cleaning solutions	
F012	R T	Cyanide sludges, wastewater	Solid	Heat treating operations	
K011	R T	Acrylonitrile acetonitrile	Liquid	Acrylonitrile manufacture	
K013	RT	Acrylonitrile acetonitrile	Liquid	Acrylonitrile manufacture	
K021	T	Antimony	Liquid	Catalyst used in fluoromethane production	
K022	Т	Phenol, acetone	Liquid	Cumene processor	
K027	T	Toluene diisocyanate	Liquid	TDI manufacturer	
K048	r	DAF float	Liquid	Petroleum refining	
K049	T	Slop oil	Liquid	Petroleum refining	
K050	T	Heat exchanger sludge	Liquid	Petroleum refining	
K051	T	API separator sludge	Liquid	Petroleum refining	
K052	T	Leaded tank bottoms '	Liquid	Petroleum refining	
K062	СТ	Pickle liquor	Liquid	Steel finishing	
K086	T	Chromium, lead	Liquid Solid	Solvents and sludges used in and resulting from ink manufacture	
J002	I	Acetone	Liquid	Chemical, pharmaceutical, coating	
1009	T	Acrylonitrile	Liquid	Plastics, surface coatings, adhesi	
J019		Benzene	-Liquid	- Chemical, plastics, coatings	
J031	I	n Butanol	Liquid	Chemical, pharmaceutical, coatings	
J03 7	T	Chlorobenzene	Liquid	Chemical, coatings	
J051	T	Creosote	Liquid	Preservative, coatings	
J056	IT	Cyclohexane	Liquid	Chemical, coatings	

3.a PART B HAZARDOUS WASTES - WASTE TYPES AND TREATMENT

HW #	Hazard Code	Hazardous Constituent	Physical State	Source Industries
U069	T	Dibutyl phthalate	Liquid	Chemical, plastics, coatings
U070	T	o-Dichlorobenzene	Liquid	Chemical, coatings, adhesives
U077	T	Ethylene dichloride	Liquid	Chemical, adhesives
U080	T	Methylene chloride	Liquid	Chemical, pharmaceutical, coating
U083	T	1.2 Dichloropropane	Liquid	Coatings
U092	I T	Dimethylamine	Liquid	Chemical, pharmaceutical
U107	T	Dioctyl phthalate	Liquid	Chemical, plastics, coatings
U108	T	1.4 Dioxane	Liquid	Coatings
U112	IT	Ethyl acetate	Liquid	Coatings
U140	IT	Isobutanol	Liquid	Chemical, pharmaceutical, coating
U154	IT	Methyl alcohol	Liquid	Chemical, pharmaceutical, coating
U159	I T	Methyl ethyl ketone	Liquid	Chemical, coating
U161	I T	Methyl isobutyl ketone	Liquid	Chemical, coating
U165	T	Naphthalene	Solid	Chemical
U169	I T	Nitrobenzene	Liquid	Chemical, coating, adhesive
U171	I	2 Nitropropane	Liquid	Coatings
U188	T	Phenol	Liquid	Chemical
U196	T	Pyridine	Liquid	Chemical
U210	T	Tetrachloroethylene	Liquid	Coatings, metal fabrication
U213	I T	Tetrahydrofuran	Liquid	Coatings, chemical, tape
U220	т	Toluene	Liquid	Chemical, pharmaceutical, coating
U226	T	1.1.1 Trichloroethane	Liquid	Coatings, metal fabrication
U2-2-8	T	Trichloroethylene	Liquid	Coatings, metal fabrication
U238	т	Urethane	Solid	Plastics, coatings
U239	1 Т	Xylene	Liquid	Chemical, coatings
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HW #	Hazard Code	Hazardous Constituent	Physical State	Source Industries	
X721	T	Waste oil - automotive and lubricating	Liquid	Automobile service	
X722	T	Fuel oil tank cleanouts	Liquid	Fuel oil	
X723	T	Oils and sludges from tank testing	Liquid	Automobile and gasoline services	
X724	T	Petroleum oil	Liquid	Tank truck cleaning	
X725	T	Oil spill cleanup residue	Solid	James Section Section 1119	
X726	T	Metal working, turbine, diese and quench oils	Liquid	Metal fabricating, diesel service	
X727	T	Waste oils from transformers	Liquid	Electrical	
X728	T	Sludge	Liquid	Waste oil processing	
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3.b The permittee is authorized to accept the following waste types for distillation and recovery operation at the facility:

D001	D002	F001	F002	F003	F004
F005	K086	U002	U009	U019	U031
U037	U051	U056	U069	U070	U077
U080	U083	U092	U107	U108	U122
U140	U154	U159	U161	U169	U171
U188.	U196	U210	U213	U220	U226
U228	U239				

3.c The permittee is authorized to accept the following waste types for blending into a solvent based fuel:

D001	D002	F001	F002	F003	F004
F005	K022	K048	K049	K050	K051
K052	K086	U002	U009	U019	U031
U037	U051	U056	U069	U070	U077
U080	U083	U092	U017	U018	U122
U140	U154	U159	U161	U169	U171
U188	U196	U210	U213 ·	U220	U226
U228	U239	X721	X722	X723	X724
X725	X726	X727	X728		

3.d The permittee is authorized to accept the following waste types for transfer only to permitted facilities:

D004	D005	D006	D007	D008	D009
D010	D011	D012	D013	D014	D015
D017	F007	F011	F012	K011	K013
K021	K027	K062	U165	U238	

3.e The permittee is authorized to accept the following waste types for storage in drums:

D001 D002 D003 F001 F002 F003 F004 F005 K022 K048 K049 K050 K051 K052 K086 All Listed "U" Codes All Listed "X" Codes.

I look forward to hearing from you that our application is now complete.

Very truly yours,

un R. Shulm.

James R. Hulm Vice President jrh:k

Information Regarding Portionstituent Release

Hazardous Waste and Hazardous Wasterom Solic Waste Management Units

Facility Name:_	Solvents Re Mary Service of New Jersey, Inc.	
	NJD00218289	
Location: Stre	et 1200 Sylvan Street	
City & State	Linden, New Jersey 07036	
Check: owner	operator <u>x</u>	
Dlosoo moudeu e	ha 6-11-	

Please review the following definitions prior to proceeding to page 2.

- I. Under the Resource Conservation and Recovery Act (RCRA) amendments of 1984, the term "solid waste" means any garbage, refuse, sludge, from a waste treatment plant, water supply treatment plant, or air pollution control facility and other discarded material, including solid, liquid, semisolid, or contained gaseous material resulting from industrial, commercial, mining, and agricultural operations, and from community activities, but does not include solid or dissolved material in domestic sewage, or solid or dissolved materials in irrigation return flows or industrial discharges which are point sources subject to permits under section 402 of the Federal Water Pollution Control Act, or byproduct material as defined by the Atomic Energy Act of 1954.
- II. A hazardous waste is a solid waste that is either listed in 40 CFR; Part 2 Subpart D ("List of Hazardous Wastes") or possesses one or more of the chaacteristics identified in 40 CFR; Part 261; Subpart C ("Characteristics of Hazardous Waste") and is not excluded in 40 CFR 261.4.
- III. A Hazardous Waste Constituent represents the basis for a specific hazardou waste being listed in 40 CFR; Part 261; Subpart D. The Hazardous Waste Constituents are listed in 40 CFR; Part 261; Appendix VIII (Hazardous Waste Constituents).
- IV. The term "solid waste management unit" (SWMU) applies to any landfill, surface impoundment, land farm, waste pile, incinerator, tank, injection well, transfer station, waste recycling operation, tank or container storage area that currently or formerly was used to manage a solid waste.
- V. Under the requirements of the Hazardous and Solid Waste Act Amendments of 1984, Section 3004U of the RCFF amendments mandates that EPA address contamination caused by prior resales of hazardous wastes and hazardous waste constituents from soliu waste management units, regardless of the time when the waste was placed in the unit or when the unit was closed.
- VI. The term "tank" includes wastewater treatment units, elementary neutralization units and short-term accumulation units that are exempted from RCRA permit requirements.
- VII. The term "release" includes any spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping or disposing into the environment, but excluding releases otherwise permitted under law (e.g., NPDES permitted discharges).

Attachment

SPECIFIC INFORMATION

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Determine, as best you can, if the particular waste would be considered a hazardous waste or hazardous waste constituent under RCRA (See definitions on page one)

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3.) For each unit noted in number one and also those hazardous waste units identified in your Part B application, please provide the following information on any prior or current release of hazardous waste or hazardous waste constituents.

> source of information that has led to the possibility that a release has occured (i.e. discoloration of surrounding soil) date(s) of release groundwater monitoring data for units not identified in your type of waste/material released quantity or volume of waste/material released nature of release (i.e., spill, overflow, ruptured tank or pipeline, leachate from landfill or surface impoundment, etc.) The plant acknowledges that past practices did not preclude the possibility of spills. The plant has been in operation since 1944.



Ground water data

	referred to in #4 in cates the presence of solvents
	in the ground. The type of material is as listed in
	our Part A. quantities are indeterminate.
a o w	In regard to the prior releases described in number three above, please provide (for each unit) any analytical data that may be available which would describe the nature and/or extent of environmental contamination that exists as a result of such releases. In addition, any information on the concentration of hazardous waste or hazardous waste constituents present in contaminated soil, ground water or surface water should be attached. Include any information/data (including groundwater monitoring data) submitted to EPA and the coxics, etc.) that concerns prior or continuing releases as described bove.
_	Ground water and soil analyses have been conducted
	and data reported to the NJDEP. This includes
_	ground water analyses dated 6/11/80; 2/19/81; 7/17/81
_	12/8/81; 5/25/82; 8/24/83 and soil analyses submitted
	in May 1983, January 1984, August 1984 and March 1985
_	
wa wa	you do not have any record of a SWMU on your site, is there any vidence from soil borings, drilling of groundwater wells, ground-ter monitoring results, exploratory pits or any excavations that ould indicate the presence of a SWMU or that a release of hazardous stee or hazardous waste constituent has occured (Please describe the pe of activity and observations that led to the discovery)?
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_	

FACT SHEET

Draft Permit For An Existing Hazardous Waste Facility

I. Name and Address of Applicant

Solvents Recovery Service of New Jersey (SRSNJ), Inc. 1200 Sylvan Street Linden, New Jersey 07036

II. Identification Number and Location of Facility

EPA ID# NJD 002 182 897 Block #580, Lot No. 21, 24, 26, 29

III. Hazardous Waste Activity

SRSNJ is a major commercial waste management facility. Primary activities at the facility are the storage of hazardous waste in containers and tanks, blending of spent solvent mixture materials as fuels for industrial uses and treatment (reclamation) of industrial spent solvents by distillation and extraction process. The plant also serves as a transfer station for the movement of containerized solidified hazardous waste from small generators to off-site authorized disposal facilities. These containers are not opened on-site and are not held for longer than ten (10) days.

IV. Hazardous Waste Types and Quantity

Wastes received at the facility will be halogenated non-halogenated spent solvents. ignitable wastes miscellaneous solid hazardous waste. The facility will be permitted to store up to 76,000 gallons of spent solvents in ten (10) tanks in the recovery area, 74,000 gallons of spent solvents in three (3) tanks in the fuel blending area, 462,000 gallons of spent solvents in twenty-five (25) tanks in the custom distillation area and 165,000 gallons of hazardous waste (3,000 \times 55 gallon containers) in containers. The permitted treatment equipment consists of one (1) fuel blending tank in the fuel blending area, two (2) thin film evaporators, one (1) jacketed flash still and one (1) packed stripping column in the solvent recovery area and three (3) batch fractionating columns, and one (1) liquid/liquid extractor in the custom distillation area.

The existing containers storage area will be closed and a new containers storage area will be constructed in the planned warehouse, Building #10. The new containers storage facility will be constructed with spill containment systems and will be permitted to store up to 130,680 gallons (2,376 x 55 gallon drums) of the permitted hazardous waste.

V. Permit Basis

Draft permit conditions are taken from N.J.A.C. 7:26-12.4, Standards Applicable to All Permit; and N.J.A.C. 7:26-9.1 et seq., Requirements for Hazardous Waste Facilities.

The minimum shell thickness for the hazardous waste storage tanks specified in Condition 14 is based on the Underwriter's Laboratory, Inc., NO 142, Standard for Steel Aboveground Tanks for Flammable and Combustible Liquids, December 9, 1981. It is NJDEP's tentative determination that this condition is consistent with the requirements of N.J.A.C. 7:26-1 et seq.

VI. Procedures for Reaching a Final Decision

Based on the type of operations and the materials to be handled to recover valuable solvents for industrial uses, the Department has determined that SRSNJ has met the requirements to operate a hazardous waste facility for which a draft permit has been written pursuant to N.J.A.C. 7:26-12.11. SRSNJ's engineering design plans and operations procedures have provided for sound hazardous waste management to minimize the threat of release of hazardous waste to land, air, and water.

i.	The comment period will begin			and
	will end	_•		•
ii.	The public hearing will be held and will be located at		· · ·	<u> </u>

VII. Comments Submission

All persons wishing to comment on the draft permit conditions or the permit application or to obtain further information should contact:

Frank Coolick, Chief Bureau of Hazardous Waste Engineering Division of Waste Management, NJDEP CN028 Trenton, New Jersey 08625 (609) 292-9880



REGISTRATION OF SOLVENT RECOVERY SERVICE
OF NEW JERSEY AS A SOLID WASTE FACILITY
Prepared by
STRAUBING AND RUBIN
CONSULTING ENGINEERS
SOUTH ORANGE, N.J.

Proj. C-1331

August 15, 1979

Attachment

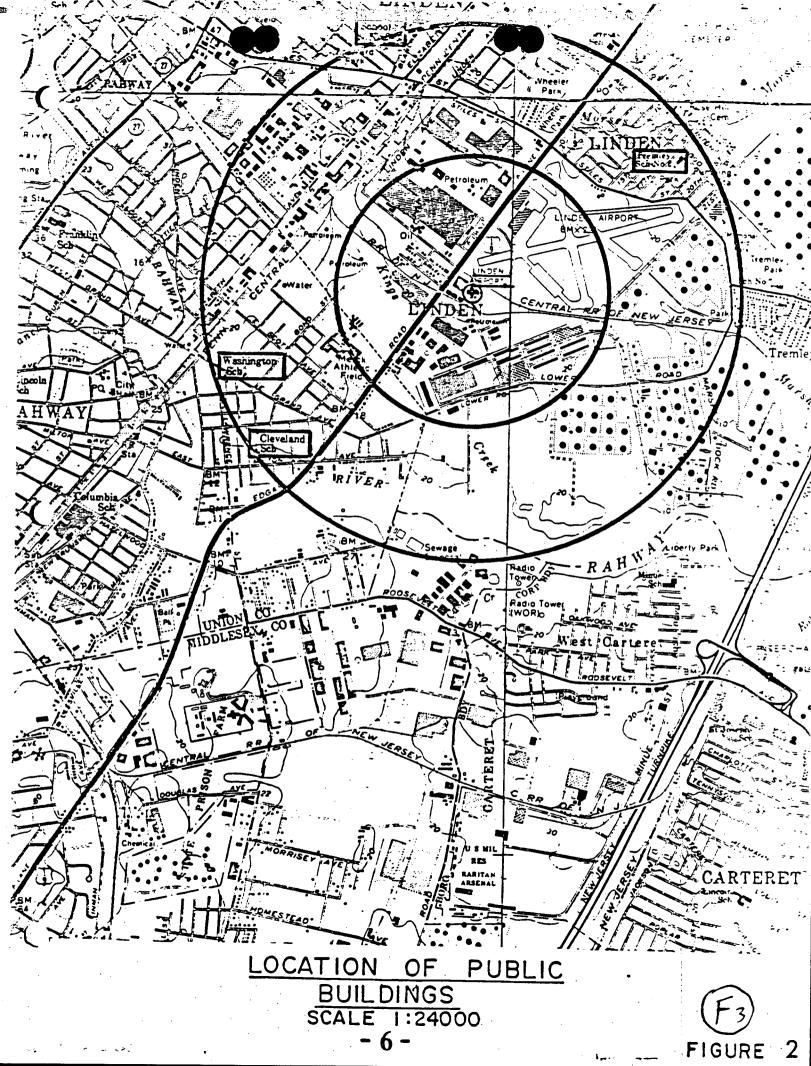


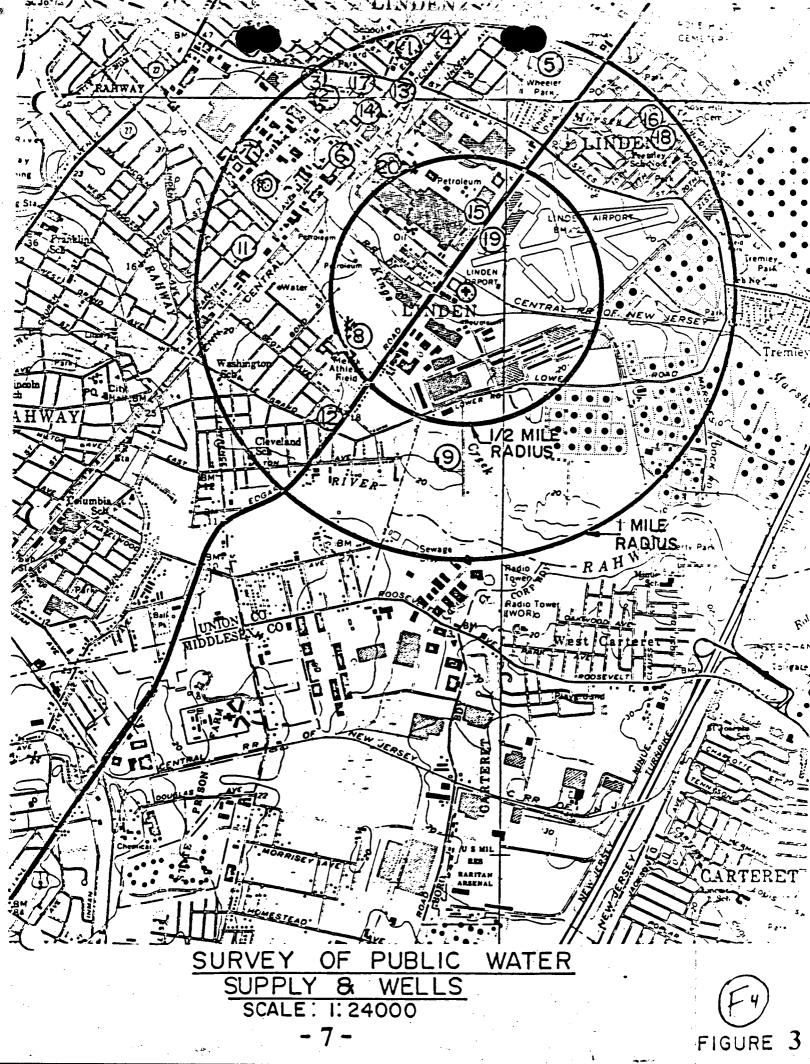
there are four public buildings within a one mile radius of the site. Each of these public buildings is a school, and each is at or very near the one mile limit. The two Linden schools in a 1 mile radius are School No. 8, and Tremley School No. 2. The schools in a 1 mile radius in Rahway are the Washington School, and the Cleveland School. Your attention is directed to Figure 2 on page 6 which shows the relationship between the schools and the SRS premises.

Site Geology

Soil borings were taken at three locations personally selected by the geologist for the Solid Waste Administration. Because the entire special waste handling facility is above ground, each of these borings was taken to a depth of 25 feet. Due to the fact that the watertable in this area is so close to grade, this 25 foot depth complies with either of the two depth requirements of subsection 7:26-8.5(b), paragraph 2(v.). The report covering the results of these borings is attached as Appendix 4. The exact location of the three borings is indicated on the site plan attached as Appendix 2.

A survey of the wells and public water supplies within a one mile radius was conducted. The results of this survey are included as Appendix 5. The information presented in Figure 3 on page 7 summarizes the results of this survey. There are no public water supplies within a one mile radius of the site, a fact that was verified by visual inspection of





the most recent editions of the maps produced by the U.S. Geological Survey. Although Morses Creek, Kings Creek, and a portion of the Raritan River fall within the one mile radius, none of these water resources are considered as being suitable sources of potable water by the State of New Jersey. Although all wells within a one mile radius are reported, only those within one-half mile are required to be identified. Inspection of Figure 3 shows only three wells are located within the half-mile radius requirement. These wells are identified as wells numbered 8, 15, and 19. Well Number 8 is located on the opposite side of Kings Creek, and at a higher elevation than the SRS facility. Its location obviates any potential problem. Wells Numbered 15 and 19 are "upstream" of the prevailing surface water drainage, and based on a visual inspection of the site and on inspection of the topographic maps, they should also be "upstream" of the prevailing underground water flow direction. A map showing the general surface water flow within a one-half mile radius of the facility boundaries is shown in Figure 4 on page 9 Preliminary results from the three soil borings taken on site indicate that the prevailing groundwater flow beneath the special waste handling facility is in a southeasterly direction, more specifically between ESE and SE by E on the compass. Positive verification of the direction of groundwater flow can only be made by long term monitoring of the groundwater elevations at several locations, and/or by dye

dispersion tests which also require a considerable period of time to complete. To facilitate the possiblity that the State of New Jersey may require monitoring wells on the SRS premises at some time in the future, the three boring sites required by N.J.A.C. 7:26-8, et seq., were completed so that they may be easily converted to monitoring wells. At present, there is no published information available from the Bureau of Topology and Geography regarding the flow patterns of the underground waters in this geographical area.

In regards to the surface and subsurface drains used to control the passage of water from areas on or adjacent to the special waste handling facility, the site plan attached as Appendix 2 shows all such drains, and their direction of flow. No further discussion on this point is deemed necessary.

Process Description

NOTE: In order to more readily visualize

the process description, the reader

is requested to refer to Appendix

6 which contains a schematic

diagram of the special waste handling
facility.

The following is a general description of the proposed waste handling facility, and its relationship to SRS's primary function:

The primary service that SRS provides in its normal



ship and receive materials by truck, the drop in vehicular traffic on Route #1 would go unnoticed. The type of vehicular traffic generated by the special waste handling facility is the same as that generated by SRS's normal day-to-day operations, i.e., tank trucks and tractor trailers. It is anticipated that there will be an increase of 9 to 15% in the total number of vehicles now accessing the site as the demand for the alternative fuel increases. The present average level is 35 trucks per week. With the special waste handling facility in full operation, this would mean that an additional three to five trucks per week would be visiting the site. The effect of such a small increase in traffic would hardly be noticeable to the casual observer. The random variations in the level of vehicular traffic generated by SRS in its normal day-to-day operations would mask the effect of the traffic generated by this special waste handling facility. This is especially true since the waste handling trucks are indistinguishable from those handling materials for custom distillation.

Discharges and Emissions

There are four possible sources of air pollution, and no sources of waste discharge from the special waste handling facility. Three of the sources of air pollution are the three conservation vents/flame arrestors—one on each of the three tanks that comprise the facility. These tanks are identified as tanks C-12,T-101 and T-102 (Shown in heavy relief on the

[fire]



site plan attached as Appendix 2 .) To minimize the effect of the sun's rays, all tanks have been painted white. AIR-29 and AIR-30 forms for all three tanks are on record with the N.J. State Department of Environmental Protection, Bureau of Air Po-lution Control. Prior to the expiration date of these forms, replacement VEM-003 and VEM-004 Forms will be submitted to provide continuity of registration for these vessels with the appropriate state agency. The fourth source of emissions to the air is the open sump used for manually unloading the contents of the 55 gallon drums. This source of air emissions is unavoidable due to the nature of the incoming wastes as was previously mentioned in the section titled "Process Decription." It should be mentioned that this open sump is open in the sense that it is open to the atmosphere. is, however, a roof over it, and two of the four sides are enclosed to protect the operators from inclement weather. In addition, as was previously mentioned, the residence time in the sump is kept to a bare minimum. Emissions are generated only for as long as it takes to unload the drums and pump their contents into one of the three tanks that comprise the special waste handling facility.

Description of the Environment Prior to Implementation of the Project and the Environmental Impact of the Project

The special waste handling facility is located on an industrial site that has been operational as SRS since 1942. Since the project has been implemented using existing tanks





SOLVENTS RECOVERY SERVICE OF NEW JERSEY, INC.

1200 SYLVAN STREET : LINDEN, N. J. 07036

TELEPHONE: (201) 862-2090 TELECOPIER: (201) 862-2384

March 24, 1988

Mr. Kenneth Siet, Section Chief
Division of Water Resources
Groundwater Quality Control Section
New Jersey Department of
Environmental Protection
401 E. State Street, 4th Floor
CN-029
Trenton, New Jersey 08625

Dept. Environmental Division of Water Resource Ground Water Quality Control

e: Solvents Recovery Service of New Jersey, Inc. NJPDES Permit #NJ0002224 Part IV DGW Section A I 3a

Dear Mr. Siet:

The reference permit, received by Solvents Recovery Service of New Jersey, Inc. on January 26th, requires submittal to the Department of a Groundwater Assessment Plan.

ERM Northeast has prepared the attached plan which we are submitting in compliance with the condition A I 3a of our reference permit.

Please note that on March 22nd a Groundwater Assessment Plan was sent to you that was not signed or sealed. Please return this to us at your convenience.

Very truly yours,

James R. Hulm Vice President

JRH:dap Attachment

cc: J. DeFilippi

E. Kuhlwein

B. Tornick

J. Stewart, Esq. - w/att.

PROPOSED GROUND WATER ASSESSMENT PLAN SOLVENTS RECOVERY SERVICE OF NEW JERSEY, INC.
LINDEN, NEW JERSEY

MARCH 1988

J.A. DeFilippi, P.E. N.J.P.E. No. 15421

PREPARED FOR:

SOLVENTS RECOVERY SERVICE OF NEW JERSEY, INC. 1200 SYLVAN STREET LINDEN, NEW JERSEY 07036

PREPARED BY:

ERM-NORTHEAST, INC. 88 SUNNYSIDE BOULEVARD PLAINVIEW, NEW YORK 11803

1.0 INTRODUCTION

1.1 Facility Description

Solvent Recovery Service of New Jersey, Inc. (SRSNJ) occupies a 10-acre site in Linden, New Jersey. SRSNJ's operation consists of three basic processes: solvent recovery, fuel blending, and custom distillation. Chlorinated and nonchlorinated solvents are recovered for recycling by flash distillation using 2 thin film evaporators each having a capacity of up to 600 gallons per hour. The annual solvent recovery throughput is about five million gallons per year. mixtures are separated and recycled in the custom distillation area using fractional distillation processes. About 1.3 million gallons per year are processed by custom distillation. Unrecoverable flammable liquids and residuals from the solvent recovery and custom distillation operation are processed in SRSNJ's fuel blending program. The fuel is sold for use in cement kilns and steel company blast furnaces. Crude and recovered solvent is stored on-site in bulk and in drums. Blended fuel is only stored in bulk.

Site facilities (see Figure 2-3) include three concrete buildings which house offices and a laboratory (Building 1),

foreman's office and locker room (Building 3) and a machine shop (Building 2). Custom distillation facilities including bulk storage tanks and fractional distillation columns are located in the northeast corner of the property. Crude solvent storage and fuel storage tanks are located in a concrete diked area in the north central portion of the site. A boiler house, two cooling towers and an electrical substation are located on the eastern side of the site. Recent additions to the site include a diked finished product tank farm, a warehouse (Building 11) in the northwest section of the site and a new drum storage warehouse (Building 10).

1.2 Site History, 1980 to 1988

SRSNJ has occupied its current site since 1944. On June 27, 1980, NJDEP granted permission in the form of a Temporary Operating Authorization (TOA) to SRSNJ to conduct hazardous waste storage, treatment and disposal operations at its facility. The TOA was extended through December 31, 1981. On October 1, 1981, an explosion occurred in the flash distillation recovery area (between Building 5 and Still No. 4) causing damage to this portion of the facility.

On July 16, 1982, an Administrative Consent Order (ACO) was entered into by NJDEP and SRSNJ. The major items included in the ACO include:

- o submit and implement plans for an improved tank farm;
- o submit and implement plans for a reconstructed flash distillation recovery area;
- o submit and implement plans for a drum storage area; and,
- o upon completion of the items above, submit a complete RCRA Part B application.

NJDEP has approved plans that have since been implemented by SRSNJ for reconstruction of the solvent recovery area and construction of an improved tank farm. In lieu of upgrading the outdoor drum storage area, SRSNJ applied to NJDEP for permission to building a new drum storage warehouse in the area of the old storage pad. Approval was subsequently granted for construction of the warehouse (Building 10).

Since the entry of the ACO, NJDEP determined that investigation of the extent and magnitude of ground water contamination at the site was required. On October 25, 1983, an Amended Administrative Consent Order (AACO) was entered into by

SRSNJ and NJDEP. The AACO described the ground water sampling program to be conducted, and also included several tasks requested by NJDEP for the selection of an optimal recovery well site.

To date, all of the ground water assessment programs included in the AACO have been conducted by SRSNJ. The tasks requested for the selection of a recovery well site were completed and summarized in a report dated June, 1984 and entitled: "Evaluation of Ground Water Recovery Well Sites at Solvents Recovery Service of New Jersey". Shortly thereafter, analytical results of all ground water samples collected in accordance with the AACO were presented in a report dated August, 1984 and entitled: "Environmental Site Assessment Development of a Remedial Action Plan for Solvents Recovery Service of New Jersey". Design specifications for ground water remediation system were then presented in a report dated February, 1985 and entitled: "Ground Water Recovery Systems-Design Plans and Bid Specifications".

A final Hazardous Waste Facility ("Part B") Permit was issued to SRSNJ by NJDEP/DHWM in January, 1988. Incorporated in this "Part B" Permit was the DGW Major Modification to SRSNJ's facilities NJPDES Permit. A third and final permit (to be issued

by the USEPA, with conditions ident_cal to the DGW major modification is needed to complete the facility's official RCRA HWF Operating Permit.

1.3 Objectives

This Ground Water Assessment Plan is submitted in fulfillment of requirements set forth in SRSNJ's NJPDES permit received by SRSNJ on 26 January 1988. Incorporated into this plan are all of the specific requirements set forth by NJDEP/DWR in their Major Modification permit. A Soil Assessment Plan, dated March, 1988 has been submitted to the NJDEP for their approval. Both the Ground Water Assessment and the Soil Assessment Plans will be implemented simultaneously so as to avoid duplication of field efforts.

2.0 PROPOSED GROUND WATER ASSESSMENT PLAN

2.1 Environmental Setting

2.1.1 Site Location

The SRSNJ facility is located on Sylvan Street, in a highly industrialized area of the City of Linden, Union County, New Jersey. A regional map is presented as Figure 2-1. The site is bounded on the north by Linden Airport, on the west by Routes 1 and 9 and a General Motors Plant, and to the south and east by numerous industries and tank farms. Tank farms extend for a mile east of the SRSNJ facility.

Surface-water bodies in the vicinity of the SRSNJ facility include Kings Creek and the Rahway River Estuary, located 1,500 feet south of the facility (see Figure 2-1). Kings Creek is a fresh water perennial stream which flows southeast into the Rahway River, which is located 6,000 feet south of the facility. The Rahway River, in turn, flows into the Arthur Kill approximately one and a quarter miles downstream. As a consequence of its proximity to the Arthur Kill, the Rahway River is brackish and exhibits tidal fluctuations. Other tidal water bodies in the area include

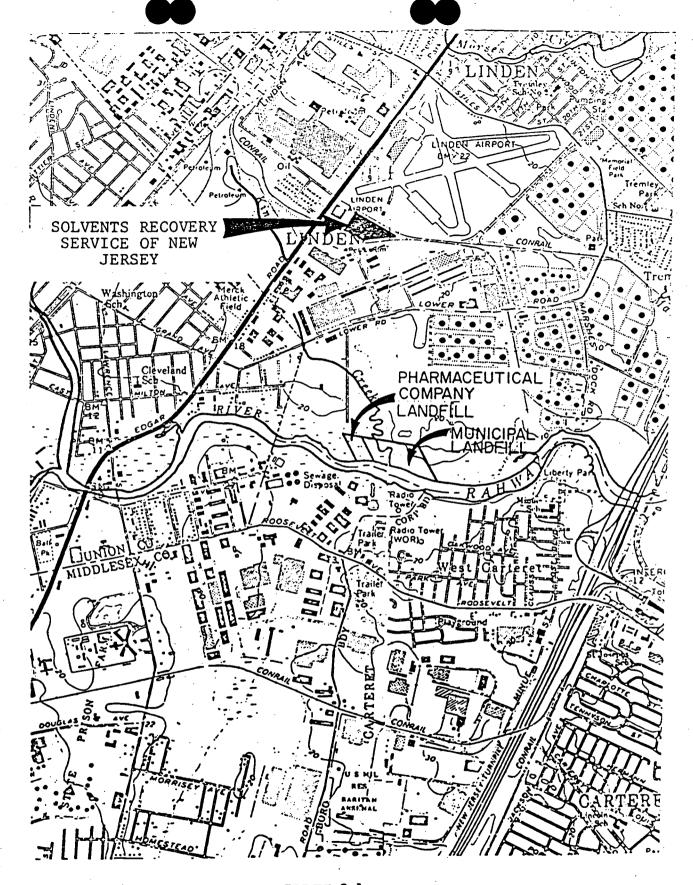


FIGURE 2-1
REGIONAL MAP

Piles Creek located 8,000 feet east of the facility. One additional perennial stream in the area is Morses Creek located 4,000 feet north of the facility.

The entire area surrounding the SRSNJ facility is supplied with potable water by the Elizabethtown Water Company. The source of this water is the Raritan River and Delaware-Raritan Canal (oral communication, Mr. Maz, Engineer, Elizabethtown Water Company). No other public water supply companies or public water supply wells exist either in the City of Linden or in the area adjacent to the facility.

2.1.2 Hydrogeology

The SRSNJ facility is underlain by glacially deposited unconsolidated Pleistocene deposits which are in turn underlain by sedimentary bedrock (Brunswick Formation) of Triassic age. Surficial soils to a depth of approximately 3 feet are comprised only of fill. Underlying this fill is approximately 15 to 25 feet of glacial till, consisting predominately of silts and clays. Bedrock was encountered at depths of 20 to 27 feet below grade. The depths to

ground water (on 8/23/83) ranged from 5 to 13 feet at the site.

Surficial deposits in Union County include three general classes of sediments which were deposited in association with the Pleistocene glacial Epoch. These three deposits are: 1) end moraine, 2) ground moraine, and 3) stratified drift. Ground moraine deposits (Nemickas, 1976) have been mapped in the vicinity of the SRSNJ facility. This deposit, also known as till, forms a thin mantle over the underlying Brunswick formation. These deposits are comprised of unstratified mixtures of clay, silt, sand, and gravel which were deposited directly by the ice sheet and are derived from the underlying Brunswick Formation. As a result, the till exhibits the same characteristic red brown color, and is often difficult to distinguish from the highly weathered portion of the bedrock.

The Brunswick formation is composed typically of thinly-bedded shales, siltstones and sandstones that range in color from reddish brown to gray. Structurally, the regional strike of the Brunswick formation in Union County is N50°E with dips 9° to 13° northwest. Major joint sets strike approximately N45°E and N75°W and both sets have a

vertical dip. Estimates of the formation's thickness in this area range from 6,000 to 8,000 feet.

Ground water flow at the site is to the southeast, approximately S40°E, towards Kings Creek and ultimately the tidal estuary of the Rahway River which is located 6,000 feet away. A ground water contour map is presented in Figure 2-2. Land use between the SRSNJ facility and the Rahway River is completely industrial, and includes large warehouses, tank farms, and municipal and industrial disposal areas. The hydraulic gradient across the site (as measured on August 23, 1983) was generally uniform and consistent. The ground water surface across the site exhibits a 3 foot decline (to the southeast) over a land-surface distance of 390 feet. Consequently, the general gradient across the site is approximately 0.008 ft./ft.

Using this hydraulic gradient and a measured aquifer permeability of 7.3×10^{-4} cm/sec, the velocity of the ground water flowing through the aquifer beneath the site is approximately 0.05 feet per day or 20 feet per year. Caution must be used when applying this rate for postulating contaminant migration because of possible chemical and

2-6

physical interaction between the contaminants and the aquifer materials.

2.2 Previous Findings

Nine ground-water wells were installed (by Wehran Engineering) and sampled (on 24 August 1983, by ERM-Northeast) at the SRSNJ facility to satisfy Sections 1 and 2 of the AACO. ERM-Northeast presented the sampling results to the NJDEP on 22 November, 1983 and included these results in an 1984 report entitled "Evaluation of Ground Water Recovery Well Sites at Solvent Recovery Service of New Jersey". Analytical tests were performed on all ground water samples as required by the AACO and in accordance with applicable NJDEP and USEPA procedures.

Ground water sampling results indicate that several volatile organic compounds were entrained within the ground water beneath the SRSNJ site. Detected in concentrations in excess of 10 ppm were the following compounds: methylene chloride, trans 1,2 dichloroethylene, 1,1,1 trichloroethane, trichloroethylene, tetrachloroethylene, 1,1,2,2 tetrachloroethane, toluene, and chlorobenzene.

The spacial distribution of contaminants were generally consistent with the local direction of ground-water flow and historical location of material handling and storage at the site. Low levels of volatile organics were found in the sample from a well located on the upgradient side of the plant boundary, while the highest concentrations of solvents were detected in the wells positioned immediately downgradient. Ground water in monitoring wells positioned outside of and further downgradient of the tank farm had concentrations of organic solvents roughly two to three orders of magnitude less than that detected immediately downgradient of the tank farm.

The above mentioned volatile organic compounds were detected in shallow monitoring wells installed on the site. The one deep (bedrock) well also revealed the presence of solvents. However, the shallow wells had an excessive length of well screen which penetrated bedrock (as specified by NJDEP), and may have induced bedrock contamination.

2.3 Work Plan

Fourteen monitoring wells (seven shallow and seven deep, in nested pairs) are to be installed to establish the ground-water quality and the direction of ground-water flow in the aquifers

beneath the SRSNJ Facility. The proposed location of these seven nested pats of wells is shown on Figure 2-3. One of the clusters (MW-1) will be positioned at an upgradient location and the remaining six clusters the downgradient locations all specified by NJDEP/DWR. Design specifications of both deep and shallow wells will comply with those set forth by NJDEP/DRW in their Major Modification Permit.

All monitoring wells will be installed by well drillers licensed in the State of New Jersey and under the supervision of an ERM-Northeast hydrogeologist. The shallow monitoring wells will be installed in unconsolidated materials using hollow-stem augers, while the deep wells will be installed using the air rotary method of drilling. At NJDEP's request, during air rotary drilling dust will be prevented from being expelled by covering the borehole with a thick piece of rubber. This piece of rubber will have a hole in its center the same diameter as the drilling rods, and will be put on the rods prior to attaching the air hammer. It is unlikely that dust will continue to be a potential problem once ground water (approximately 10 ft. below grade) is encountered.

At each of the seven well clusters the deep well will be installed first, and during the penetration of the overburden

to what depth

split-spoon samples ill be collected every five feet. Rock cores will be collected during the installation of three of the deep wells. All drilling materials which are used within the borehole will be cleaned with a steam jenny before their use at each borehole.

For each shallow well, a 10 foot section of slotted stainless-steel (4-inch I.D. schedule 40) well screen will be installed, and extended to the surface with a riser casing of flush joint, threaded, 4-inch stainless steel pipe. The top of the screen is to be located approximately two feet above the top of the water table. A gravel pack will be emplaced to approximately 2 feet above the screen, where a 1-foot thick bentonite seal will be emplaced. The remaining annular space will be filled with a cement/bentonite grout. Either steel pipes or flush-mount covers will be set over the monitoring well risers and secured into the ground with concrete so as to protect the well from vandalism. Further protection will be provided by locking inner caps.

The deep monitoring wells will consist of open bedrock boreholes having stainless-steel well casing (6-inch I.D. schedule 40) within the overburden. These casings will be seated 5 feet into competent bedrock. Based on existing information,

feet below land surface. All deep wells will be completed to a depth of 50 feet. This depth would enable potentially significant drawdowns to be measured during the subsequent pumping test, but is still shallow enough to limit the possible rapid vertical migration of contaminants within the well. Rock in three of the deep wells (MW-1, 3, and 6) will be cored to a depth of 50 feet below the ground surface using an NX-size core barrel. Cores are to be identified, logged, and labeled in accordance with ERM Standard Procedures for Rock Coring. The NX-cored wells will be subsequently reamed to the required six-inch diameter.

To complete each monitoring well installation, the wells will be developed by pumping with either a centrifugal or submersible pump. The well development data will be presented for each individual well on the field logs. Development is necessary to ensure that a good hydraulic connection is established between the well and the aquifer.

All of the monitoring wells will be surveyed for elevation (National Geodetic Datum of 1929) and New Jersey grid coordinates by tying-in with an off-site datum. Depth to ground water will be synoptically measured in all of the wells and converted into

ground-water elevations so that ground rater contour maps can be constructed for the parcel. Also, the NJDEP well permit tags will be emplaced on each of the well covers.

Ground water samples are to be collected from the site and analyzed on a quarterly basis. The initial (annual) samples to be collected from the site will be analyzed for a comprehensive set of parameters, as outlined in Table 2-1. Samples collected at the other three quarters (every three months after the initial sampling) will be analyzed for more specific chemical parameters (Table 2-1). These sampling frequencies and parameter lists are those set forth in the NJDEP/DWR major modification to the Part "B permit"

All of the ground water samples collected at the SRSNJ site will be analyzed by a laboratory certified in the State of New Jersey. Analyses and reporting will comply with the Tier II format requested by NJDEP. Discussed in Section 3.0 are the sampling methods and handling procedures, equipment decontamination procedures, analytical testing methods, and the QA/QC program to be implemented in the field. Section 4.0 outlines the health and safety protocols to be followed while sampling at the site.

TABLE 2-1 SUMMARY OF PROPOSED GROUND WATER SAMPLING

<u>PARAMETER</u>	SAMPLIN	G PERIOD
	Initial/ <u>Annual</u>	Quarterly
√Volatile Organics + 20 (624 Method)	x	x
Base/Neutral Extractable Organics + 10 (625 Method)	x	
√ Acid Extractable Organics + 10 (625 Method)	x	
/ PCBs (608 Method)	X	
Total Petroleum Hydrocarbons (TPH)	x	
Total Dissolved Solids (TDS)	x	x
Total Organic Carbon (TOC)		x
Total Organic Halogen (TOH)		x
∨ pH	x	x V
Metals:	X X X X X X X	x ~ x ~ x ~ x ~ x ~ x ~ x ~ x ~ x ~ x ~

to properties

The nine wells presently at the site (see Figure 2 2) will be abandoned and sealed by a driller licensed in the State of New Jersey for well abandonment. A cement/bentonite mixture will be used to backfill the wells, and all surface evidence of the wells (protective casings, well-casing stickups, etc.) is to be removed.

2.4 Reporting of Sampling Results

The results from the analyses of ground water samples will be summarized in tabular form, while the actual laboratory reports will be contained within an Appendix. A detailed evaluation of the data will follow in a discussion section of the report, where a comparison will be made between the concentration levels found at the SRSNJ site and those levels which either occur naturally or have been adopted by the USEPA and NJDEP as levels not to be exceeded (maximum concentration levels).

Complete documentation for all field and laboratory procedures will be included in the Appendices of the sampling results report. This includes Monitoring Well Installation Reports, NJDEP Monitoring Well As-Built Forms (Form A), Location Certification Forms (Form B), copies of all field notebook pages, and laboratory analytical data reporting sheets.

2-15

3.0 QA/QC PLAN

3.1 Sample Collection Procedures and Equipment

The ground water sampling techniques are discussed below. All efforts will be made to follow sampling protocols as set forth by NJDEP/DWR in their major modification permit. These efforts include laboratory cleaning of sampling equipment and sample containers so to eliminate artificial contamination, implementation of a quality assurance program to maximize accuracy and precision of the analytical results, and proper installation of monitoring wells.

Ground water samples will be collected during the site investigation using stainless-steel bailers. These bailers will be lowered into the monitoring wells with polypropylene suspension cord. Prior to well sampling, approximately three volumes of well water will be removed from the monitoring wells with either a bailer or a centrifugal pump. All of the equipment (bailers and possibly pump hosing) to be lowered into the well will have previously been thoroughly cleaned as discussed below.

3.2 Sample Equipment Decontamination

Ground water sampling equipment is to be cleansed by washing with laboratory grade detergent in potable water, followed by a clean water rinse, a distilled water rinse, a solvent rinse (acetone or methanol for organics, and 10% nitric acid solution for metals), and lastly, a final distilled water rinse. The equipment will be allowed to air dry after this final rinse. Equipment not immediately used will be wrapped in aluminum foil until its use.

3.3 Sample Maintenance and Shipping

All ground water samples will be sent to the analytical laboratory from the SRSNJ site under rigid documentation controls to minimize the opportunity for tampering and to maximize their tractability. Information about each individual sample will be recorded in either a field notebook or on a chain-of-custody form.

The information that will be recorded for each ground water sample is as follows:

o Monitoring Well Number

- o Analysis to be Performed
- o Sampler's Identity
- o Date of Sampling
- o Preservative used (if any)

The laboratory will assign a sample number upon receipt and report the analytical results using both their number and the sample code provided on the sample.

A chain-of-custody form will accompany each container of samples sent to the laboratory. All personnel responsible for sampling, receiving and analyzing the samples will sign the form. In between sampling and shipping events, all samples will be kept on ice in an insulated cooler. Transportation of the samples to the laboratory will be by overnight carrier in an ice chest sealed with "evidence" tape. The tape is designed so that it cannot be removed without being noticed.

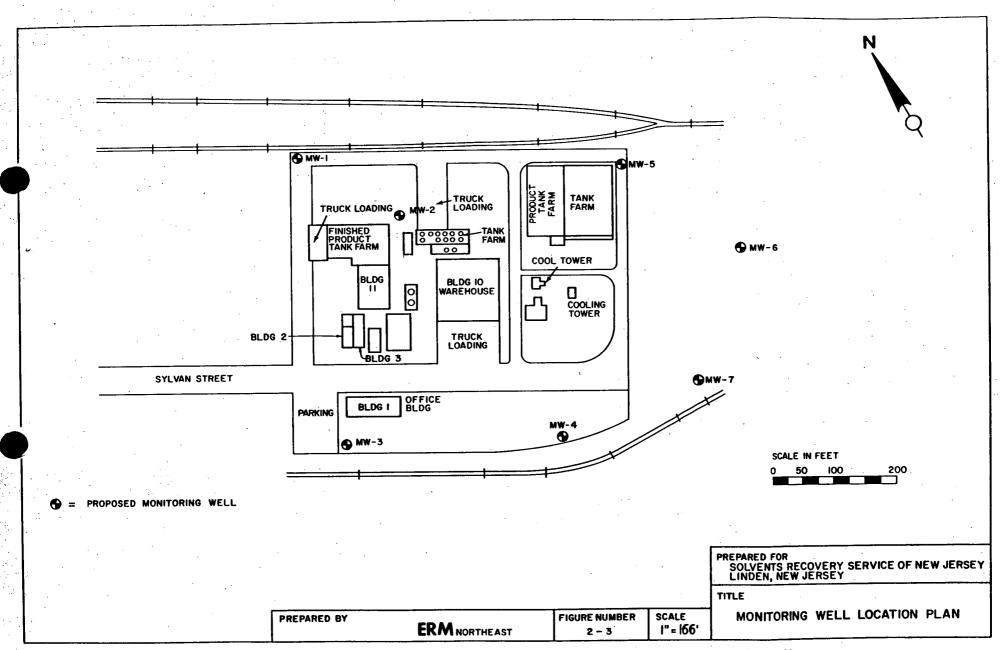
All ground water samples will be kept refrigerated after collection and until received by the contracted laboratory. The laboratory will transfer the samples to their refrigerators and keep them at a maximum temperature of 4°C until they are analyzed. Holding times for soil samples as specified by 40 CFR Part 136M "Guidelines Establishing Test Procedures for the

Analysis of Pollutants" will be strictly watched and adhered to. Analytes and methods for analysis for soil samples are given below in Section 3-4.

3.4 Laboratory Analysis and Quality Assurance Program

Ground water samples will be submitted to a certified laboratory in the State of New Jersey. The analytical methods to be used by the laboratory for each parameter and each matrix (soil, blank water) are presented in Table 3-1. Table 3-2 presents the reporting limits achievable by state-certified laboratories using the analytical methods specified by NJDEP. These reporting limits represent minimum values for the analytical parameters. Higher reporting limits will be used when dilution of the samples is required because of elevated analyte concentrations. The actual reporting limits for each sample will be presented in the laboratory analytical reports.

NJDEP-mandated QA/QC protocols will be strictly adhered to. Laboratory data will meet all precision and accuracy criteria, and documentation of this compliance will be presented in a Tier II laboratory data package. Acceptable minimum reporting limits will also be maintained for all samples, and a quality assurance program will be implemented in the field.



PROPOSED SOIL ASSESSMENT PLAN SOLVENTS RECOVERY SERVICE OF NEW JERSEY, INC. LINDEN, NEW JERSEY

MARCH 1988

J.A. DeFilippi, P.E. N.J.P.E. No. 15421

PREPARED FOR:

SOLVENTS RECOVERY SERVICE OF NEW JERSEY, INC. 1200 SYLVAN STREET LINDEN, NEW JERSEY 07036

PREPARED BY:

ERM-NORTHEAST, INC. 88 SUNNYSIDE BOULEVARD PLAINVIEW, NEW YORK 11803

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physical interaction between the contaminants and the aquifer materials.

2.2 Previous Findings

Soil sampling was conducted in November 1983 through April 1984 at the SRSNJ facility to satisfy Sections 1 and 2 of the AACO. The sampling results were presented by ERM-Northeast in an August 1984 report entitled "Environmental Site Assessment and Development of a Remedial Action Plan for Solvents Recovery Service of New Jersey". Sampling was carried out in five rounds (as outlined in Table 2-1), some of which addressed different requirements of the AACO. Analytical tests were performed on all soil samples as required by the AACO and in accordance with applicable NJDEP and USEPA procedures.

Soil sampling results indicate that soil contaminated with chlorinated and non-chlorinated solvents at concentrations exceeding 10,000 ug/l was uniformly found beneath and adjacent to all storage and process areas on the SRSNJ site. This was estimated to include the entire central portion of the site including the finished product tank farm, finished product warehouse, secondary separating basin, flash distillation and solvent recovery area, crude product storage and fuel blending

TABLE 2-1
SUMMARY OF PREVIOUS SOIL SAMPLING

Sampling	Sample Numbers	<u>Location</u>	<u>Date</u>	Sample Collector	<u>Analyses</u>
I	TD-172 to TD-175	Custom Distillation Tank Farm and Drum Storage Pad	4/27/83	NJDEP	Volatile Priority Pollutants, EP Toxicity, Oil and Grease Reactivity for Sulfur and Cyanide, PCB's
II	F-1 to F-5	Within Warehouse Footings	11/29/83	ERM-NE	Volatile Priority Pollutants, Volatile Non-Priority Pollutants, Petroleum Hydrocarbons (Total)
	Soil Piles	Soil Piles, North Side of Property	11/29/83	ERM-NE	Volatile Priority Pollutants, Volatile Non-Priority Pollutants, EP Toxicity
III	A-1 to D-4	150 ft. Grid Covering Site	11/29/83	ERM-NE	Volatile Priority Pollutants, Volatile Non-Priority Pollutants, Petroleum Hydrocarbons (Total)
IV	SW-1 to SW-11	25 ft. Grid Within Warehouse Footings	1/11/84	ERM-NE	Volatile Priority Pollutants
ACO	G9692 (A,B,C) G9693 (D,E,F)	Warehouse Footings	2/25/85	ETC	Dioxin (2,3,7,8-TCDD)

area, the former derum storage area and the entire custom distillation tank farm area.

A group of 10 to 12 individual solvent compounds are responsible for the bulk of the surface soil contamination at the site. The compounds that were most widely found at elevated concentrations include the following:

toluene
ethylbenzene
trichloroethylene
methylene chloride
xylene

1,1,1-trichloroethane
tetrachloroethylene
methyl ethyl ketone
methyl isobutyl ketone
chlorobenzene

These compounds are all commonly used industrial solvents. Also, they accurately reflect the chemical streams processed at the SRSNJ facility.

Although the extent of the soil contamination problem was most thoroughly documented in the drum storage pad/drum warehouse area due to the density of soil samples, contamination was estimated to be comparable throughout the central and northeast section of the site. This was based on the results of soil samples B-3, C-3, D-3, D-4 and TD-175 which indicates

contamination concentrations generally equal to or greater than those found in F and SW sample series collected within the warehouse footings.

Away from the process and storage areas, the site appears to be clean or only slightly impacted. Samples collected south of Sylvan Street (A-1, B-1, C-1 and D-1) on the outer site roadway (A-2, A-3, A-4, B-4 and C-4) and in the undeveloped southeast section of the site (D-2) were found to have total solvent concentrations generally below 1 mg/l. Additional soil sampling, for dioxin only, was performed in the area where the explosion occurred in 1981 (Figure 1-1). No dioxin was detected in the composites analyzed of the six samples collected. This data is supplied in Appendix A (see Figure 1-1 for sampling locations) so as to comply with NJDEP's request (Response to Comments, Draft Permit Public Notice on October 27, 1986) for soil dioxin sampling and analysis.

Intuitively, soil contaminants would be expected to occur mostly between 1.5 and 3.0 feet below grade because of the highly-permeable nature of the sand-and-gravel fill and the low permeability of the underlying till. This would permit spilled solvents to readily migrate laterally through the sand-and-gravel fill, but migrate vertically very slowly into the till.

Contaminant concentrations below 3 feet were not determined in the previous soil sampling program.

2.3 Work Plan

The soil samples will be collected in existing permeable areas, so as to enable an assessment of contamination from surface spillage in the areas not covered by asphalt see Figure 1-1). These samples will specifically address the contamination identified from previous sampling programs in the vicinity of borings B-3, C-3, D-1, TD-1/2 and TD-1/75, as per NJDEP's request. Also, all previously stock-piled soil has been removed from the site, so NJDEP's recommendations for sampling these piles has not been incorporated into this work plan.

Soils samples will be collected from three different depth intervals at the site. The location of these samples is shown in Figure 1-1, while the proposed analyses are discussed below and summarized in Table 2-2. Shallow samples are to be collected from 0 to 12 inches, followed by a second sample to be collected from 18 to 30 inches below grade. Each of these samples will be analyzed for volatile organics compounds (EPA Method 624), total petroleum hydrocarbons, PCBs, cadmium, chromium, and lead.

TABLE 2-2
SUMMARY OF PROPOSED SOIL SAMPLING

Graph Boundary Cons

•			
Target Area	Sampling Points	<u>Depths</u>	Analyses
TD-172	TD-1	0-12"	VOC, TPH, PCBs,
		18-30"	Cd, Cr, Pb VOC, TPH, PCBs,
		2.41	Cd, Cr, Pb
		3-4	PP + 40
	ED 0	4-5'	PP + 40
	TD-2	0-12"	VOC, TPH, PCBs, Cd, Cr, Pb
		18-30"	VOC, TPH, PCBs,
' .			Cd, Cr, Pb
B3	B3-1	0-12"	VOC, TPH, PCBs,
			Cd, Cr, Pb
·		18-30"	VOC, TPH, PCBs,
			Cd, Cr, Pb
	B3-2	0-12"	VOC, TPH, PCBs,
			Cd Cr Ph
		18-30"	Cd, Cr, Pb VOC, TPH, PCBs, Cd, Cr, Pb
			Cd Cr Dh
	B3-3	0-12"	VOC, TPH, PCBs,
			Cd, Cr, Pb
		18-30"	VOC, TPH, PCBs,
	•	•	Cd, Cr, Pb
	B3-4	0-12"	VOC, TPH, PCBs,
			Cd, Cr, Pb
		18-30"	VOC, TPH, PCBs,
			Cd, Cr, Pb
•	B3-5	0-12"	VOC, TPH, PCBs,
•		,	Cd. Cr. Ph
	•	18-30"	Cd, Cr, Pb VOC, TPH, PCBs,
			Cd, Cr, Pb
		3-4 '	PP + 40
		4-5'	PP + 40
	·		** T TU
C3	C3-1	0-12"	VOC, TPH, PCBs,
		- 	Cd, Cr, Pb
	· · ·	18-30"	VOC, TPH, PCBs,
	.`	-0 3,0	Cd Cm Db
			Cd, Cr, Pb

TABLE 2-2 (CONTINUED)

SUMMARY OF PROPOSED SOIL SAMPLING

	•		•
Target Area	Sampling Points	<u>Depths</u>	Analyses
	C3-2	0-12"	VOC, TPH, PCBs,
·		18-30"	Cd, Cr, Pb VOC, TPH, PCBs,
	C3-3	0-12"	Cd, Cr, Pb VOC, TPH, PCBs, Cd, Cr, Pb
		18-30"	VOC, TPH, PCBs, Cd, Cr, Pb
	C3-4	0-12"	VOC, TPH, PCBs, Cd, Cr, Pb
		18-30"	VOC, TPH, PCBs, Cd, Cr, Pb
		3-4'	PP + 40
		4-5'	PP + 40
D3	D3-1	0-12"	VOC, TPH, PCBs,
		18-30"	Cd, Cr, Pb VOC, TPH, PCBs,
	D3-2	0-12"	Cd, Cr, Pb VOC, TPH, PCBs,
		18-30"	Cd, Cr, Pb VOC, TPH, PCBs,
	D3-3	0-12"	Cd, Cr, Pb VOC, TPH, PCBs,
		18-30"	Cd, Cr, Pb VOC, TPH, PCBs, Cd, Cr, Pb
	D3-4	0-12"	VOC, TPH, PCBs, Cd, Cr, Pb
		18-30"	VOC, TPH, PCBs, Cd, Cr, Pb
	•	3-4'	PP + 40
		4-5'	PP + 40
West of TD-175	TD-3	0-12"	VOC, TPH, PCBs, Cd, Cr, Pb
		18-30"	VOC, TPH, PCBs, Cd, Cr, Pb
	TD-4	0-12"	VOC, TPH, PCBs,
•		18-30"	Cd, Cr, Pb VOC, TPH, PCBs, Cd, Cr, Pb

TABLE 2-2 (CONTINUED)

SUMMARY OF PROPUSED SOIL SAMPLING

Target Area	Sampling Points	Depths	Analyses
D4	D4-1	0-12"	VOC, TPH, PCBs, Cd, Cr, Pb
·		18-30"	VOC, TPH, PCBs, Cd, Cr, Pb
•		3-4'	PP + 40
		4-5'	PP + 40
•	D4-2	0-12"	VOC, TPH, PCBs,
			Cd, Cr, Pb
	•	18-30"	VOC, TPH, PCBs,
	D4-3		Cd, Cr, Pb
,	D4-3	0-12"	VOC, TPH, PCBs,
		7.0 0.00	Cd, Cr, Pb
		18-30"	VOC, TPH, PCBs,
•	D4-4		Cd, Cr, Pb
•	D4-4	0-12"	VOC, TPH, PCBs,
	•		Cd, Cr, Pb
		18-30"	VOC, TPH, PCBs,
	• .		Cd, Cr, Pb
QA/QC	Dup. Soil Samples		VOC, TPH, PCBs,
	•		Cd, Cr, Pb
	Dup. Soil Samples		PP + 40
	Field Blanks		PP + 40
	Field Blanks		VOC, TPH, PCBs,
		•	Cd, Cr, Pb
	Trip Blanks		VOC
	Tier II Blanks		PP + 40
t *	Tier II Blanks		
			VOC, TPH, PCBs, Cd, Cr, Pb

Notes:

- 1) Sampling depths of 3 to 4 feet and 4 to 5 feet are approximate. Actual sampling intervals will be the first 12 inches of glacial till ("3-4 ft.") and second 12 inches ("4-5 ft.").
- 2) Samples will be analyzed and results will be presented in accordance with Tier II protocols.

Borings at a few of these sampling locations will be advanced deeper for additional soil samples. These samples are to be collected from the first twelve inches of glacial till, and followed by a second sample to be collected from 12 to 24 inches below this interface. Each of these samples will be analyzed for all priority pollutants (PP + 40) and total petroleum hydrocarbons (Table 2-2).

The Children Constitution

All of the soil samples collected at the SRSNJ site will be analyzed by a laboratory certified in the state of New Jersey. Analyses and reporting will comply with the Tier II format requested by NJDEP. Discussed in Section 3.0 are the sampling methods and handling procedures, equipment decontamination procedures, analytical testing methods, and the QA/QC program to be implemented in the field. Section 4.0 outlines the health and safety protocols to be followed while sampling at the site.

2.4 Reporting of Sampling Results

The results from the chemical analyses of soil samples will be summarized in tabular form, while the actual laboratory reports will be contained within an Appendix. A detailed evaluation of the chemical data will follow in a discussion section of the report, where a comparison will be made between



the concentration levels found at the SRSNJ site and those levels which either occur naturally or have been adopted by the USEPA and NJDEP as levels not to be exceeded (maximum concentration levels).

Complete documentation for all field and laboratory procedures will be included in the Appendices of the sampling results report. This includes soil boring logs (when applicable), copies of all field notebook pages, and laboratory analytical data reporting sheets.



State of New Jersey DEPARTMENT OF ENVIRONMENTAL PROTECTION DIVISIO OF WATER RESOURCES

CN 029 Trenton, NJ. 08625-0029

George G. McCann, P.E. Director

CERTIFIED MAIL RETURN RECEIPT REQUESTED

Mr. James R. Hulm Solvents Recovery Service of New Jersey, Inc.. 1200 Sylvan Street Linden, NJ 07036

Dear Mr. Hulm:

RE: Review of the Proposed Soil and Ground Water Assessment Plans for SRS of Linden, NJ

The Department has received your Proposed Soil Assessment Plan and Proposed Ground Water Assessment Plan for Solvent Recovery Services (SRS) in accordance with the NJPDES/DGW Permit. A review of the plans has been completed, and the plans shall be amended to reflect the following comments.

The first set of comments deals with the Proposed Soil Assessment Plan (SAP), followed by comments regarding the Ground Water Assessment Plan (GWAP).

The first comment regarding the SAP also holds true for the GWAP (because the description is included in both reports), and is in the hydrogeology section (2.1.2). In the section describing ground water velocities, the report needs clarification as well as a discussion of assumptions. The report utilizes a measured hydraulic gradient and a permeability value to calculate a ground water velocity "through the aquifer beneath the site." First, this velocity was calculated for the overlying glacial till, and not the Brunswick Formation-aquifer. Secondly, when calculating a ground water velocity (V=KI/n; where V=velocity, K=hydraulic conductivity, I=hydraulic gradient and n=porosity) a porosity value must be either measured or estimated and the report does not mention what porosity value was used or how it was derived. Also, the term hydraulic conductivity should



replace permeability. Groundwater and Wells (Driscoll, 1986) provide porosity estimates for tills to be on the order of 10-25%. Given this range, calculated velocities are between .17 and 0.07 ft/day or 26 to 62 ft./yr.

2.3 Work Plan

The second sentence in the first paragraph should include the boring D-3 area to be further investigated.

The report also states that "all previously stock-piled soil has been removed from the site, so NJDEP's recommendations for sampling these piles has not been incorporated into this workplan." SRS shall provide documentation regarding the the sampling, if any, and disposal of the soils.

The proposed depths and analytical parameters for the soil sampling (Table 2-2) are consistent with the NJPDES Permit. However, the Department is modifying some of the locations of the deeper soil borings to the following locations:

Area B3: from B3-5 to B3-1 Area C3: from C3-4 to C3-3 Area D3: from D3-4 to D3-1 Area D4: from D4-1 to D4-3

These locations may have a higher probality of detecting soil contamination. Additionally, SRS shall notify the Department at least two weeks prior to the commencement of the soil sampling. The Department reserves the right to change the location(s) of the soil boring(s) based on field observations.

OA/OC Plan

In the description of the use of stainless steel trowels, the report mentions that soil samples will be transferred to bowls for accumulation, description, and mixing. Soil samples that are to be analyzed for volatile organic compounds (VOCs) should not be mixed in a bowl; they should be disturbed as little as possible and the sample should be placed into the sample container so as to minimize the head space.

All field decontamination procedures shall adhere to the outline provided in the NJDEP Field Procedures Manual.

In the Field Blank description (p. 3-9), the report states "Generally, field blanks will be collected . . . ". The word generally should be deleted because field blanks should be collected on each day of sampling.

Health and Safety Plan

The report states that organic vapors will be monitored routinely with an organic vapor analyzer (OVA). The OVA should be used during all of soil sampling activities. Additionally, an Hnu photoionization detector should be utilized in conjunction with the OVA to monitor the air. All soil samples shall be monitored with the two devices and the concentration readings shall be recorded on the boring logs.

The following comments are in regard to the Proposed Ground Water Assessment Plan.

The nine wells presently at the site shall be sealed in accordance with N.J.S.A. 58:4A-4.1 et seq.

OA/QC

The monitoring wells should be sampled from the least contaminated area (i.e., background well) first to the area where the most severe contamination is suspected.

In the travel blanks section (page 3-8), the report should read: A travel blank will be included in each shipment of ground water samples . . ., and not soil samples.

Health and Safety Plan

The Health and Safety Plan is inadequate in that it only addresses soil sampling. In fact, it is identical to the soil sampling Health and Safety Plan. The amended Health and Safety Plan shall be specifically geared towards monitoring well installation and ground water sampling.

If you have any questions, please contact Stanley Radon, of my staff, at (609)292-8427.

Sincerely yours,

Kenneth Siet, Section Chief

Ground Water Quality

Control Section

Division of Water Resources

WQM240
Enclosures
c: Barry Tornick, EPA Region II

1200 SYLVAN STREET : LINDEN, N. J. 07035

CUNTOM DISTRUCTIONS
FOR MILESTRY

PHONE (201) 925-8600

April 17, 1975

Dubte of New Jorsey
Department of Environmental Protection
Livision of Veter Resources
Transco, MJ 00025

Aviention: Mr. Thomas F. Harding
Supervisor of Permits, Rayitan Basin

Do: Mational Pollutant Discharge Elimination System Application NJ 0012224 (25D ONW 2 000524).

Gintlemen:

Enclosed are our updated permit forms issued by the Corps of Engineers. We have been in correspondence with the State of New Jersey, Department of Engineers in Protection, Division of Water Resources in reference to cut with discharge. We have, as of this date, requested some information which we need to put into our overall program. In this regard, we have a massing scheduled with them on April 17th to review some of the information we have a shorten we have a continuous our facility with the water sources, uses and discharge.

If you need any additional information other than that which we have already provided, please feel free to give me a call.

Very truly yours,

John P. O'Connell

JP 50: bjk L. okosene

Co: Mr. James A. Sellar



DEPARTMENT OF THE ARMY, CORPS OF ENGINEERS

APPLICATION FOR PERMIT TO DISCHARGE OR WORK IN NAVIGABLE WATERS AND THEIR TRIBUTARIES

SECTION I. GOMERAL INFORMATION 2. Name of applicant and title of signing official SOLVENTS RECOVERY SERVICE OF N.J., T Vice Fresident 1. State Application Number to be assigned by N.J. Div. Dim. Type SOLVENTS RECOVERY SERVICE OF N.J., T Vice Fresident 1. State Application Number to be assigned by N.J. Div. Dim. Type SOLVENTS RECOVERY SERVICE OF N.J., T Vice Fresident 1. State Application Number to be assigned by	Scourage the
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2200 Sylvan Street	
Linden, NJ 07036	
	
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Vice President	Wounds.
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Scivents Recovery Service of N.J. Inc. 1200 Sylvan Street, Linden, NJ 07036	
(201) 925-8600 Linden, NJ 07036	
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contained in this application, and that to the beet of my knowledge and belief such information is true, complete, and accura-	
And videge and ballet such information is true, complete, and agents	th the enformers;
18 U.S.C. Section 1991 commission and	
Whose is a second of Applicant	
Whoever, in any motiver within the jurisdiction of any department or agency of the United States knowingly and wilfully falsified or uses any false writing or decument knowing same to contain any false, fictitious or fraudulent statements or representation of the united States knowingly and wilfully falsified than \$10,000 or imprisoned has more than fire years, or both.	•
or uses any false writing of document knowing same to constitue any false, fictitious or fraudulent statements of constituents and processing and will be a same to constitue and false.	fies, concesi or
or uses any false writing or device a material fact, or makes any false, fictitious or fraudulent statements or representations \$10,000 or imprisoned hot more than five years, or both, any false, fictitious or fraudulent statement or entry, shall be in the content of the cont	tions, or may en fine the common s
FOR COMPU OF ENGINEERS DES OVEY	
Are discharge structures	
ata received, form not complete Major? Minor? N/A?	
Will Manual Constitution and the second seco	
ato received, form complete	
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mo day yr	•••
6. Check type of application:	7. Number of original application
a. Original b. Revision 🔀	000524
E. Name of facility where discharge or construction will occur.	
SOLVENTS FECOVERY SERVICE (OF N.J., INC.
9. Full mailing address of facility named in item 8 above.	
1200 Sylvan Street, Linden	, NJ 07036
10. Names and mailing addresses of all adjoining property owners whose proper	ty also adjoins the waterway.
	,
11. Check to indicate the nature of the proposed activity:	
	ion with Discharge b. Discharge only
12. If activity is temporary in nature, estimate its duration in months.	
If application is for a discharge:	
13. List intake sources	
Estin	nated Volume in Million
Source Gall	ons Per day or Fraction Thereof
Municipal or private water supply system	
Surface water body	
Ground water	
Other	
14. Describe water usage within the plant	
	nated Volume in Million
Type Gall	ors Per day or Fraction Thereot
Cooling water	0 2 4
Boiler Feed water	$\underline{\underline{}}$ $\underline{\underline{}}$ $\underline{\underline{}}$ $\underline{\underline{}}$ 5
Process water Sunitary system*	
Cther	
15. List volume of discharges or losses other than into navigable waters.	
	nated Volume in Millian ons Per day or Fraction
	Thereof
Municipal waste treatment system Surface containment	· · · · · ·
Underground disposal	
Waste Acceptance firms	
Evaporation	$\overline{}$ $\overline{}$ $\overline{}$ $\overline{}$ $\overline{}$
Consumption	
• Indicate number employees served per day	34

If structures exist, or old precise location of the ec	tions in a or sill read	ostruction will occur, the	(Office use c		
a. Name the corporate bour activity will occur.	ਸ਼ਫ਼ੋaries within which the	structures exist or the			_
State	New Jersey	County Union	City or 1	own Lindan	
h. Nume of waterway at the				Linear	
· ·		ventually drai	ne into Art	-1	
•				ny and all ourfall devices, dispersion	
2.7d Non-structural point.	t or discharge, must be a	trached to this application.			
21. For construction or work fully shown on detailed properties (Section II of this (continue)			ought under 33 U.S.C. the drawings those str	403, the character of each struct uptures for which separate a solu-	
	a granted by Federal, in		cies for any structures	, construction, discharges or dispa	 S
T	ype of document	ld. No.	Date	Issuing Agency	
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25. Describe the proposed exist					<u>.</u>
 Describe the proposed meti- determine its effect upon the 	ie waterway.	which will be used to measur	e the volume of any s	clids which may be deposited	. : .
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28. State rates and puriods of de	pousition described in the	25 ·			
	provided in the	em aco _e : ==			
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Nume of corporati	e boundaries within which the po State	pint of discharge is lo Count			City or Town
. 3	New Jersey	4 <u>U</u> T	nion		s <u>Linden</u>
7. Latitude _	ocution of the point of discharge 4 0 Degrees; 3 7 Mi 7 4 Degrees; 1 5 Mi	n: <u>0</u>	Stor	n sewer:	point of discharge. S drains into Arthur Kill
10. Hus ai piicatio	n for water quality certification. Date	or description of imp Check if certi is attached to	ficate		ite: Jame Issuing Agency
	mo cty yr				
11. Marrativé desc		service of r	efining c	ontamina	n, and specific manufacturing process ted industrial o industry. This
	is accomplished b	y distillation	on, salt	treatmen	t, and filtration.
		e consists o			
	discharges, wash contaminated with				
	and soluble inorg				
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1000 SYLVIN, STREET : LINDIN, N. H. OTOBO

FOR INDUSTRY

PHONE: (201) 925-8600

May 30, 1975

Mr. W. S. Beggs State of New Jersey Department of Environmental Protection Division of Water Resources Trenton, NJ 08625

Dear Mr. Beggs:

Attached is a copy of the information we can provide for the rear discharge or second discharge of our plant. I would like it also noted for the record that this discharge was mentioned in our earlier application to the Environmental Protection Agency dated April 15, 1975, a copy of which was sent to your office. As this, at present, is only a storm water discharge, it is impossible for us to obtain an analysis of the effluent. Since this is a swampy area in parts, there will be some contamination of this water.

I did not use Standard Form C as our original application was done on the Department of the Army Corps of Engineers' forms. Therefore, I felt two forms possibly could end up with confusion of this application at this late date. The amount of flow used for the calculations was based on 43" of rain water per year as obtained from the National Weather Service historical average. The maximum rate was based on a rate of 4.8" of water in a day.

Very truly yours,

John P. O'Connell

JPOC:bjk
Attachment

cc: Mr. Richard Baker

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APPLICATION FOR PERMIT TO D	DISCHARGE OR WOR	IN NAVIGABLE WATERS AND THEIR	TATEUTATES
Supplement to Original I	Application		
date 1 4/15/75 section a general implantation		1. Otare Application Number (to be as	signed by Carps on decreased
SECTION I. GENERAL IMPEGLIATION		21 J 519. Diei. Tres	S4 000 000 1000
2. Name of applicant and title of signing official	SOLVENTS RE	COVERY SERVICE OF N.	J., INC.
	Vige Presid	lent	
3. Mailing address of applicant			
5. Highling 51 2 mas and a special spe	<u> 1200 Sylvar</u>		
	<u> Linden. EJ</u>	07036	
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<u></u>	<u>-</u>		
4. Name, address, telephone number and title of a	applicant's authorized ag O'Connell	ent for permit application coordination ar	ig correspondince.
· · · · · · · · · · · · · · · · · · ·	esident		
Solvent	s Recovery S	Service of M.J., Inc.	
1200 Sv	lvan Street	Linden, NJ 07035	
(201) 9	25-8600		
NOTE TO APPLICANT: Buffer to the pamphlet of before attempting to co	entitled "Parmits for Wo	ork and Structures in and for Discharges or	Daposits into Mavigable Waters"
a. All information contained in this application entitled "Confidential Answers" must be us mercial or financial information of a confiditionatial treatment can be considered only flattached sheet. However, in no event will id information. b. The applicant shall furnish such supplement of additional specials needed for a complete that sheet the item numbers to which answer d. Drawings required by items 20 and 21 should applicable, copies of a water quality certified Section II below), the additional information of Section II below), the additional information and discharge or deposit is involved, an application all an official of the rank of corporate vice present application must be signed by a general b. If no discharge is involved, an application makes the application must be signed by a general b. If no discharge is involved, an application makes the application is hereby made for a permit or	ential nature. The infort for that information for that information for tentification of the contrary information as is recresponse to any item or ers apply. Id be attached to this application or a written contrary information of a written contrary information fee of \$100 momitted by a corporation sident or above who repeated by the applications on being partner or the propriets have be signed by the applications of the propriets and being permits to authorize the	which a specific written request of confidents and frequency of a discharge be recognized by the District Engineer in order to this form, attach a sheet entitled "Additionation. Other papers which must be attenuation which describes water quality we, and the confidential information sheet must be submitted with this application. At must be signed by the principal executive orts directly to such principal executive of aff of the corporation. In the case of a pair. Other signature requirements are discussificant or his authorized agent.	entiality has been mode on the nized as confidenties or provident over provident of a confidenties of provident over provident of a confidenties of provident over provident of a confidential of a confidential over provident of a confidential over provident over provident over provident over provident over provident over proprietarily, used in the paraphies.
contained in this application, and that to th	ne best of my knowledge	and belief such information is true, comp	plete, and occurate.
		Signature of Applicant	
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Whoever, in any matter within the jurisdict covers up by any trick, schame, or device a or uses any false writing or document know than \$10,000 or imprisoned not more than	material fact, or makes ving same to contain any	and take tictificus of fraudulent stateme	nts of representation in the second
	FOR CORPS OF ENG		
Acronym name of applicant	· · · · · · · · · · · · · · · · · · ·	Are discharge structures	14.2
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but without certificate		Date sent to EPA, NOAA, D/I, AEC,	
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5. Date					<u> </u>					
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	SE	PLANT PROCESS AND DISCHA	
1. Direherge describ	b. Property r	2. Implementation (0.1) schedule	6. Discharge Serial Rec.
frame of corporate b	coundaries within which the po-	nt of Chaharge is located. County	City or Town
3.	New Jersoy	4. Union	s. <u>Linden</u>
State the precise los	ation of the point of discharge.	l _	vey at the point of discharge.
7. Letitude 8. Longitude	4 0 Degrees; 3 7 Min 7 4 Degrees; 1 5 Min	$\frac{0}{100} \frac{0}{100} \frac{0}{100} = \frac{0}{100} \frac{0}{100} = \frac{0}{100} \frac{0}{100} = $	ewer (Back Discharge)
10. Has application	for water quality certification o Date	Check if certificate is attached to form	so, give date: Name Issuing Agency -
	mo day yr		
11. Narrative descri	ption of activity (include terms	of general 4-digit Standard Industrial C ately 4 acres of pla	lassification, and specific manufacturing process).
	water dischard	e. No process water	er from plant
	drains into re	ar area at present	due to earthen
	dike which se	parates process area	i iiom lear area.
		<u> </u>	
		13. Principal product.	14. Amount of principal product producted
12, Standard indust	pial classification number. 2915	Recovered	j per day.
		Solvents	
	·		
15. Frincipal triviti	nste (cl.	10. Amount of principal raw m consumed per day.	ateriai 17. Number of batch diliphar par day.
	Contaminated	Not appl	icable Not applicable
	Solvents		Not us says
			20. Date discharge will begin.
13. Average gallens	per beich discharge.	19. Dute discharge begun.	
	Not applicabl	June day	1941 Not applicable v
21. Describe v. aste	abatement practices.		
	Earthen dike	soparatés process a	rea from
	rear acreage	of plant to prevent	discharce
	<u>into this are</u>	a from processing a	rea
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ENG FORM 4345-1

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ATTITION OF TOSE HER MANY OF SHEET A DOMEST TMENT WORKS Facility Name ביי ביינים ביינים ביינים ביינים ביינים ביינים ביינים ביינים ביינים ביינים ביינים ביינים ביינים ביינים ביינים ב 2. D.E.P. ID No. (Official Car Chy) TRERREY, INC. DTW Used Sewer System Cwner LINDER ROSELLE SEWERAGE AUTHORITY, LINDEN, ROSELLE SEW. AUT, LINDEN ROSELLE SEWER AUTUCE application must include: (See Instructions) a. Discharge Location Map b. List of Building Floor Drains Average Flows and Treatment (For Each Discharge to DTW System) c. Line Drawing E. SPERATION CONTRIBUTING FLOW OUTFALL vene or No.) 1. Operations (List) C TREATMENT 2. Average Figu (Include Units) 1. Description 2. Coces From BOILER WATER ME 200 gal./day DIRECT TO SEVER NO. 1 SANITARY WASTEWATER XX 2100 DIRECT TO SEVER COCLING TOWER BLOWDOWN XX 12,000 DIRECT TO SEVER XX ₩ NO. 1 STORM WATER RUNOFF 25,200 RUNS THROUGH A SEPARATOR :⊆ NO. 2 3 NO. 2 DISTILLATION 4,500. TO HOLDING TANK FOR STRIPPING ENO. 1 SEDIMENTATION 1-0 1,000 TO HOLDING TANK FOR STRIPPING 3 NO. 2 J.-0 SOLVENT EXTRACTION ショウウウ TO HOLDING TANK FOR STRIPPING MER DISCHARGE TO DOMESTIC 2-W 50,000 NΞ TREATMENT WORKS 4-E ntermittent Flow (Complete if any discharge described in 5. above is intermittent or seasonal) OPERATIONS CONTRIBUTING FLOW me or Na.) FREQUENCY DURATION FLOW RATE N/A TOTAL VOLUME A. Does an effluent guideline limitation promulgated under Section 304 of the Federal Act apply eximum Production Yes (Complete 78) No (Go to Item 8) e the limitations in the applicable effluent guideline expressed in terms of production (or other measure of operation)? answer to 78 is Yes, list quantity which represents a reasonable measure of actual production, in terms and units used NTITY PER DAY | UNITS OF MEASURE OPERATIONS, PRODUCT, MATERIAL, ETC. N/A AFFECTED CUTFALLS



LIGHT OF ENVIRONMENTAL P C.102

STANDARD APPLICATION FORM (CP = 1) CONSTRUCTION AND DISCHARGE PERMITS

READ REQUIREMENTS PLEASE TYPE OR PRINT

/	PLEASE TYPE OR PRINT
1	SOLVENTS RECOVERY SERVICE 1. Applicant/Owner OF NEW JERSEY, INC. Telephone (201) 862-2000
	Permanent Legal Address 1200 SYLVAN STREET
ŀ	City or Town LINDEN
1-	City or Town LINDEN State N.J. Zip Code 07036
_ 2	Location of Work Site
;	Name of Facility, if applicable SOLVENTS RECOVERY SERVICE OF N.J., INC.
	Street/Road 1200 SILVAN STREET
	1-14 / 65-77 Lot No33-46 / 97-109 Block No. 21,22,23,24,26,27,28 &29
i	Municipality LINDEN State N.J. Zip Code 07036
!	County UNION
3.	If applicable, give name of: Engineer/Surveyor/Well Driller/Geologist/Soil Scientist (Specify).
!	Name N/A Name of Firm if employee Name of Firm if employee
	Name of Firm, if employee N.J. License No
	Address
ļ	Address County
İ	State Zip Code
;	Telephone ()
4.	This is an application for "NJPDES"/SIU
:	(Name of permit, certification, approval or exemption. See Item 9. Next Page.)
-	
5.	Fee is attached (If applicable). \$ 550 \$50 Registration (Provide explanation of how fee was calculated as \$500 Engineering)
į	(Provide explanation of how fee was calculated. Read Requirements Section of Standard Application booklet.)
6	Estimated construction cost of project:
i :	
1	Y
_ :	portion for which this permit is requested.
7.	I have included certifications of any public notifications. Yes No
3.	If applicable:
	(For Waterfront Development applications, 8c. must be completed.)
1	a. Source of Water Supply <u>ELIZABETHTOWN WATER COMPANY</u>
-	b. For Treatment at (Water Treatment Plant)
1	c. Stream, Waterway, Pond or Lake N/A
	d. Wastewater Treatment Facility THE LINDEN POSELLE SEWERAGE AUTHORITY
	TANDEN RUSELLE SEAFRAGE AUTUOFFT

FOLLOW INSTRUCTIONS CAREFULLY
READ REQUIREMENTS SECTION



Ģ.	Have any other application siste/project been submitted, or for this project? (Iff yes, ii) successful and project number below.)	state permits be	en issued
	No Yes Decision	·.	
	No Yes Decision	APPLICATION	•
-		STATUS	
		(PENDING	
	PERMIT TYPE	APPROVEDI	PROJECT =
	TERMIT THE		
9.1	CAFRA		· · · · · · · · · · · · · · · · · · ·
9.2	Waterfront Development (Riparian)		
9.3	Wetlands	-	
9.4	Purchase Water		
	Diversion:		
٥.	Divert Water Supply for Public Use	•	
9.5			
9.6	Divert Surface Waters for Private Use		
9.7	Divert Subsurface/Percolating Water for Private Use		
9.8	Well Drilling		
	Water Lowering:		
9.9	Permanent Lowering		
-	· · · · · · · · · · · · · · · · · · ·		
9.10	Temporary Lowering.		
9.11	Construct/Modify, Operate Public Potable Water Works		
9.12	Connection between an approved water supply and non-approved supply		•
9.13	Water Quality Certification		
9.14	···		
9.15	Stream Encroachment		
9.16	Sewer Systems: Collectors, Pump Station, etc		
9.17	Exemption from Sewer Ban		
9.18	New Jersey Pollutant Discharge Elimination System (Specify)	•	
9.19	Solid Waste Permits (Specify) N.J. TOA #2009	. <u>c</u>	
9.20	Air Quality Permits (Specify) Vent permits - see a	ttached	·
9.21	Delaware and Raritan Canal Review Zone "Certificate of Approval"		
9.22	Other State agencies' permits	•	
9.23	Local Permits	•	
9.24	Federal Permits	•	
10.	Brief Description of the Proposed Project and Intended Use:		
			, 1
	Existing facility		
		· · · · · · · · · · · · · · · · · · ·	•
11.	I hereby certify that the information furnished on this application (and the	attachments) is	true. I am
	aware that false swearing is a crime in this State and subject to prosecution.		•].
-		0 1	
	1/2 /2 /	. //	- C
	1/20/82 Jane	- /\. C+	
-	Date // Sid	nature of Applica	nt
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	*		ハロソノ

STATE OF NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION DIVISION OF WATER RESOURCES 1474 PROSPECT STREET P.O. BOX CN-029 TRENTON, NEW JERSEY 08625

FACT SHEET

FOR DRAFT NUPDES PERMIT TO DISCHARGE INTO:

THE LINDEN ROSELLE SEWERAGE AUTHORITY

SOLVENTS RECOVERY SERVICE OF NEW JERSEY, INC. HAS APPLIED FOR A NEW JERSEY POLLUTANT DISCHARGE ELIMINATION SYSTEM (NJPDES) PERMIT, TO THE DEPARTMENT OF ENVIRONMENTAL PROTECTION TO DISCHARGE INTO THE ABOVE DESIGNATED DOMESTIC TREATMENT WORKS.

DATE APPLICATION RECEIVED: MAY 21, 1982

MALE ALD ADDRESS OF APPLICANT:

NJPDES NO. NJ0002224

SOLVENTS RECOVERY SERVICE OF NEW JERSEY, INC. 1206 SYLVAN SEREET LIMBEN, NEW JERSEY 07036

NAME AND ADDRESS OF FACILITY WHERE DISCHARGE COCURS:

SCLVENIS RECOVERY SERVICE OF NEW JERSEY, INC. 1200 SYLVAN STREET LINDER, NEW JERSEY 07036

RECEIVING COLLECTION SYSTEM (IF DIFFERENT FROM DTV):

DESCRIPTION OF FACILITY OPERATIONS:

THE FACILITY RECLAIMS SOLVENT (SIC 7399) TO MEET CUSTOMER SPECIFICATIONS. CALCULATED AMOUNT OF ANHYDROUS CALCIUM CHLORIDE IS USED TO REMOVE TRACE AMOUNTS OF WATER FROM THE SOLVENT. THE DISCHARGE FROM THE FACILITY IS 50,000 GALLONS PER DAY TO THE LINDER ROSELLE SEWERAGE AUTHORITY. CONSISTING OF WASTEWATER FROM STRIPPING OPERATIONS, COOLING TOWER DIOVEDOWN AND STORM WATER RUNOFF.

WQM66-G/PTS: fmm

PERMIT SUMMARY TABLE

COMPARY: Solvents Recovery Service

* LRSA granted SRS & Variance

of New Jorsey, Inc.

LOCATION: 1200 Sylvan Street

Linden, N.J. 67036

LAT: 40° 36' 52"

LONG: 74° 15' 07"

INDUSTRY TOTAL FLOW: 50,000 GPD

RECEIVING POTW: Linden Roselle POTW NJPDES: NJ0024953

D 131 1 =	S.A.	11	NUFDES	: NJ0024953
REVIEW ENGINÉER:	Renneth Coldst	ein POTW	DESIGN	CAFACITY: 17 MGD
PARAMETER	DATA APPLIC	FROM		LIMITS FROM
FLOW				ORDINANCE
AVG. TIMPERATURE	(^C F) 73		. '	
PH RANGE	7.0			max. = 150
AMMONIA AS (N) (mg	•	•	· · · · · · · · · · · · · · · · · · ·	6 - 9
TSS (mg/l)	32			· · · · · ·
TDS (mg/l)	203			600
OIL & GREASE (mg/l		.		
BOD ₅ (mg/1)	936	. L		50
COD (mg/1)	1692			2300
TOC (mg/1)	3900			3500*
SULFIDE	4	_		
COLOR	Absent	•		0.2
CHROMIUM	Absent	•		
LEAD (TOTAL)	.05			
RINC	Absent			
CTHYLENE CHLORIDE	Absent			
(mg/1)	4.3	ores a Marina		6 5
CLUENE (mg/1)	1.8	,		See Basis
,1,1 TRICHLOROETHAN	· ·			See Dasis
(mg/1)	.73			See Basis
FUNOLS (mg/1)	Absent	•		10

STATEMENT OF BASIS FOR THE

SIU PERMIT

All numerical conditions were taken from the Linden Roselle S.A. Rules and Regulations, with the exception of BOD and COD. Solvent Recovery Service requested and received a variance from the LRSA for BOD and COD from the levels in the Rules of 600 and 1,000 respectively. The variance dated January 3, 1984 permits SRS to discharge BOD up to 2300 mg/l and COD up to 3500 mg/l. Since LRSA is currently meeting its own permit limitations, the Department will utilize the variance limits in this permit.

In addition, the Department is requiring monitoring and limitations for Total Volatile Organic Compounds. SRS is in the business of recovering solvents, thus there is a chance that certain volatile compounds would end up in the discharge. An EPA publication dated February 1984 entilted "Pharmaceutical Manufacturing Point Source Category" contained a methodology for developing volatile organic compounds limitations for any type of discharge. Based upon this methodology, a factor is calculated based upon the fraction of the total wastewater flow contaminated with the volatile compound. Since SRS has a variable solvent input, the calculation for the factor will change daily. In this regard, the factor was conservatively assigned a value of 1.0. The factor is multiplied by the effluent values achievable by the EPA treatment technology for volatiles, namely steam stripping. These values are as follows for the three major solvents recovered at SRS:

	<u>Avg</u> (30-day)	2	Max
Methylene Chloride	9.5 mg/l	•	35.2 mg/l
Toluene	8.1 mg/l		43.5 mg/l
l,1,1-trichloroethane	9.5 mg/l		-35.2 mg/1

Since methylene chloride is the most prevelant compound, the limits will be based on the above values for methylene chloride. (The values are multiplied by the factor of 1.0, thus there is no change in the values.)

STATE OF NEW JERSEY CONTROL DEPARTMENT OF ENVIRONMENTAL PROTECTION

NOTICE OF AUTHORIZATION



PERMIT NO. 193002224

ISSUANCE DATE

EFFECTIVE DATE

EXPIRATION DATE:

ISSUED TO

Solvent Recovery Service of New Jersey, Inc.

1200 Sylvan Street Linden, N.J. 07036 FOR ACTIVITY/FACILITY AT

Same as Applicant

OWNER

Same as Applicant

ISSUING DIVISION

Vater Resources

Coastal Resources

☐ Environmental Quality

TYPE OF PERMIT

New Jersey Pollutant Discharge Elimination System (NJPDES)

SIU Indirect Discharge

STATUTE(S)

APPLICATION N

N.J.S.A. 58:10A-1 et seg.

N/A

A PERMIT TO

Discharge industrial process wastewater into the Linden Roselle S. A. under the terms and conditions stated within.

Authority of:
The U. Gaston, Jr., P.E.
The Control of Water Resources

DEP AUTHORIZATION

Form DSP- 008 7/80

THIS NOTICE MUST BE CONSPICUOUSLY DISPLAYED AT THE ACTIVITY FACILITY SITE.





State of New Jersey

DEPARTMENT OF ENVIRONMENTAL PROTECTION DIVISION OF ENVIRONMENTAL QUALITY JOHN FITCH PLAZA, CN027, TRENTON, N.J. 08625

Jan 6, 1982

Mr. Joseph A. Rossi Solvents Recovery Service of NJ, Inc. 1200 Sylvan St. Linden, NJ 07036

A permit and certificate was approved for equipment as follows:

Company Name: Solvents Recovery Service of NJ, Inc.

Company Location: Linden

Designation: P-14, P-15 and P-16; (3) 6000 Gal Tanks for mixed solvents

Approval Date: Jan 6, 1982

Certificate Status: Temporary

Expiration Date: April 6, 1982

Due to our computer procedures we are unable to issue the approval form letter at this time. However, this letter is equivalent to the form letter. It is intended to notify you of our action and serve as an approval letter until the form letter is processed and issued. The form letter will include your permit and certificate number and New Jersey stack identification number. It will be sent to you within several weeks.

Very truly, yours,

William F. Mart, Supervisor New Source Review Section

Bureau Air Pollution Control

cc: MF0

Attachment







APPLICATION FOR PERMIT TO CONSTRUCT, INSTALL OR ALTER CONTROL APPARATUS OR EQUIPMENT

TO: New Jersey State Department of Environmental Protection Bureau of Air Pollution Control P. O. Box 1390 Trenton, New Jersey 08625

Date	June	20√	1975	
Date				

Use instructions, Air-D13

	·		· ·					
	1. Full Business Name Solvents Recovery Serv	vice of New Jersey, I	nc.					
	2. Address of equipment and/or control apparatus:	A contract of the contract of						
Sec. A	1200 Sylvan Street	Linden	Union					
	No. Street	Municipality	County					
	3. Location on premises (Bldg., Dept., area etc.)	olumn Tank Storage Ar						
	4. Nature of Business Chemical		SIC No. Fed 28 Ident.					
_	1. New process equipment and new air pollution con New air pollution control apparatus on existing poly New process equipment with no control apparatus	rocess equipment	:					
Sec. B	Other:							
	2. Prior pemit numbers covering this installation. Spec	•						
	3. Estimated starting dateJuly, 1975Esti	imated completion Augus	t, 1975					
	1. Description of operation <u>Storage of crude to</u>	be distilled						
	2. Identify process equipment 7 vertical steel storage tanks 11'6"x30' - 18000 gal.							
	3. Raw materials (names) Various crude solve							
Sec. C	(See D below)	5c3	2					
		nounds ner harch						
	4. Operating procedure:	Total pounds per hourTotal pounds per batch						
	Continuousstoragehrs. per day days p	er Neek Month						
	Batch: hrs. per batch Batche		$rac{\epsilon}{t}$					
	Physical and chemical nature of air contaminants whi open air:	ch must evolve from operati	on and be emitted into the					
	AUD CONTINUES	AMOUNTS OF CONTAMINANTS						
:	AIR CONTAMINANTS	With Control Apparatus	Without Control Apparatus					
Sec. D	Various solvents BP range 82-166°C.	<0.01 #/hr.	0.5 #/hr.					
	Isopropyl alcohol 82° lowest	·	(During infrequent					
	Dimethyl acetamide 166° highest —		loading of storage					
İ			tanks).					
	•							
1								
ŀ	· · · · · · · · · · · · · · · · · · ·		<u> </u>					
		`						

		
	1. Describe air pollution control apparatus	None
		with a 4" (depending on tank size) flanged
		conservation vent operating at vacuum and
	pressure of 5 oz/sq. in.	
	2. Efficiency of control apparatus: 99+ %	
	3. Height of discharge above ground30	fc.
Sec. E	4. Distance from discharge to nearest property line	fc.
	5. Volume of gas discharged into open air 7.4	cu. ft. per min. at stack conditions
	6. Exit linear velocity at point of discharge	ft. per minute at stack conditions
	7. Temperature at point of discharge ambient	oF
	8. Will emissions comply with existing local requir	ements?Yes
	9. Initial cost of control apparatus \$ 1500	· · · · · · · · · · · · · · · · · · ·
	10. Estimated annual operating cost \$ 250	
·		:
	This application is submitted in accordance with the my knowledge and belief is true and correct.	Lenes M. Chamara
	Solvents Recovery Service of N.J. Inc.	Signature — all copies Thomas McNamara
	1200 Sylvan Street	Name (Print or type) Technical Director
	Mailing Address Linden, N.J. 07036	Title (201) 925-8600 Ext. 18
	Zip Code	Telephone No.
1	DO NOT WRI	TE BELOW
		ER CONTROL APPARATUS OR EQUIPMENT
į	Application for permission to construct, install or set forth above is APPROVED.	alter the equipment and/or control apparatus as
	Aug 5 1975	
	P 20438	roved by:
	P 20444 Thru	ervisor, Permits & Certificates
	· MATTI OIA	

Submit original and three (3) copies



VEMINSLS-1 NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF ENVIRONMENTAL QUALITY
STACK LOG LISTING 05/31/98 PLANT COUNTY MUNICIPALITY BUSINESS NAME PLANT NAME PLANT CONTACT SOLVENTS RECOVERY SERVICE OF NEW JERSEY 40097 UNI LINDEN CERT COMPANY DESIGNATION 000 MISCELLANEOUS INSPECTIONS
TANK TO1
TANK TO2
TANK 193 ZERO jõi jej et s 004 TANK T94 . **305** TANK T 05 006 TANK T76 07/30/92 09/30/92 09/30/92 09/30/92 03/04/92 08/04/92 TANK BT 1
TANK BT 2
TANK BT 3
TANK BT 4
TANK BT 4
TANK BT 4 P.C. 080 023823 TANK 81 03/04/93 TANK 77 10/29/87 D C D W TANK PERM TANK 74 DC0 4 03/04/02 2 20.1 090 TANK 7 10/29/37 DED 4 ñañ TANK TO 10/29/87 090 ĴŹŽ 771 = 7 = 03/34/92 TANK 69 p=5 1 0245 PERM 030 TANK 66 10/29/87 ŏ9ŏ 03/04/02 proba. TANK 54 TANK 63 őeő 029 029 029 P = 0 4 03/04/92 TANK 62 Č90 25.0 prio + 231 553.4 03/04/02 ŋġġ TANK C-7 032 .023943 PERM 03/04/92 TANK C-6 0.90 วัวรั 090 023345 023346 023347 734 230 TANK C-4 035 10/29/97 TANK 0.50 03/04/22 PER.4 03/54/92 0.90 10/29/87 Ď9ŏ

DENOTES UNDEFINED STATUS



PAGE

VEHINSES-1 DIVISION OF ENVIRONMENTAL PROTECTION STACK LOG LISTING COUNTY MUDICIPALITY BUSINESS NAME PLANT YAME PLANT CONTACT UMI. LINDEN SOLVENTS RECOVERY SERVICE OF NEW JERSEY STACK 037 033 CERT EXP. DAT 09/04/92 12/30/93 STATUS COMPANY DESIGNATION TANK C-1 023848 <u>090</u> วัรจ๋ TANK 040 12/30/82 12/30/82 12/30/82 12/30/92 TANK ÓŽŠŠŠŽ DELETE TANK 043 10/17/85 030 12/30/92 рёйм TANK 0-21 วัลัว TANK R-5 TAME P-4 CRUDE STOPAGE TANK.C-11 7-16 TANK 02 D = D +4 TANK 23 03/04/92 PERM TANK 94 023370 D = 2 .4 TANK 201 TANK 202 TANK 203 TANK 300 TANK 83 DED 4 0.00 03/04/92 PERM ÖPÖ 09/04/92 P 20 14 090 Ďaŭ. 10/20/87

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NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION DIMISION OF INVIRONMENTAL QUALITY . STACK LOG LISTING VEMIUSUS-1 COUNTY MUDICIPALITY EUSINESS MAME PLANT NAME PLANT CONTACT SOLVENTS RECOVERY SERVICE OF MEH UPRIEN 40097 UNI LIBER STACK STATUS TXP. DAT DEDM DEA TANK 84 D = 0.54 053507 T-07 non กักร 50% 204 LUWA THIN-FILM EVAPORATO
DOMESTACK
STILL CONCEMSER VENT E-4
MIDER FILM EVAPORATOR: COMDEMSER 5-10 065593 CEOM 113 DEDM 088 116 088 r ĒR v OBB DEPM 090 C-8+ CRUDE STORAGE TANK 048930 03/13/91 080 048831 PERM 030 TOTAL STACKS FOR REGIONAL OFFICE 1 122

¢¢¢¢ TENOTES UNDEFINED STATUS

TOTAL STACKS FOR THE COUNTY OF UNION

090

2 5 SEP 1305

NEW JERSEY STATE DEPARTMENT OF ENVIRONMENTAL PROTECTION

TO	Marja vanOuwerherk,	HSMA		
	William O'Sullivan,		9/19/84 DATE	
SUBJEC	Solvents Recovery	Systems Remedial Action Plan		_

As requested, I have quickly reviewed the August 27, 1984 Remedial Action Plan for Solvents Recovery Services and the attached fact sheet. In brief, uncontrolled air stripping to remove volatile organic substances from the groundwater is clearly unacceptable. Following are some emission rates I have calculated based on a 50 gal/min pumping rate:

CONTAMINANT	CONCENTRATION	EMISSIONS 1b/hr
Total volatiles	1649 ppm	371
Tetrachloroethylene*	100 ppm	2.25
Trichloroethylene*	220 ppm	4.95
Tetrachloroethylene* (down gradiant)	70,000 ppm	1,575

* Toxic volatile organic substances require state of the art air pollution control if emitted at greater than 0.1 lb/hr.

The text on page 7-2 incorrectly states that "no difficulties are anticipated in receiving an air discharge permit". The levels of contaminant emissions of both volatile organic substances and toxic organic substances are so high that air stripping should not be considered without carbon adsorption pretreatment.

kc

S. Kuhrtz

M. Polakovic

G. Pierce

L. Miller

Full Sivi - Johnson , having (Sicis)

NEW JERSEY STATE DEPARTMENT OF ENVIRONMENTAL PROTECTION

MEMO

TOA1	lan Edwards		
FROM	Andrew Bara	DATE	3/16/84
SUBJECT_	Solvents Recovery Service of 1	and the second s	
Re: Th	heir Permit and Certificate #4734		

By reviewing the data part of their permit and certificate, and the results of the stack test as conducted by the subject company, I feel that we do not have the required justification to revoke the referenced certificate, nor do we have the conditions to grant a permanent five-year certificate as recommended in the memo of Mr. Polakovic - dated July 12, 1983.

Basically, the test that was conducted showed compliance, but the boiler operating conditions were tailored to operate at only 42% of rated capacity and by using a specific formulated fuel mixture.

Secondly, this boiler must be operated within the following parameters - fuel Ash content less than 0.001 Sulfur, less than 0.001 no chlorinated or TVOS Solvents, and no heavy metals at a flame temperature of 2600°F., and minimum destruction efficiency of 99.9%.

The importance of the above-stated parameters should be persued, since a test results as conducted in 1983 showed a chlorine content of 0.29%, and since this pollutant was not listed on any company permit.

Conclusion:

The attached memo, dated February 28, 1984, from Mr. T. Leonard is accurate, correct, and very descriptive in pointing out the existing deficiencies. Thus, I concur with his findings, conclusions, and recommendations (RCRA Provisions apply, and Division of Waste Management Regulations must be complied with).

The Stack tests be rescheduled:

- 1) Company conduct new stack test, meeting the requirement of D.W.M.. Boiler operating parameters and D.E.Q.
- 2) Maintain present company permit and certificate as temporary, but schedule random monthly fuel sampling program to insure full compliance.

Recommendations (cont.):

- 3) Company file for a new permit which will meet present D.W.M Requirements of (RCRA) and Environmental Quality provisions.
- 4) Company install instrumentation and test parts, so that adequate measurements can easily be made to continually determine combustion efficiency. (This provision be made as a requirement in obtaining any new permit and certificate).
- 5) The company designate a specific dedicated feed/storage tank for the solvent fuel that is designated as waste solvent fuel for this boiler. This storage tank containing solvents requires all the VOS controls, and a permit and certificate from D.E.Q.

Andrew Bara, Supervisor Newark FIeld Office

c.c.: Ernie Mancini

(70)



a. Elivaras

State of New Jersey

DEPARTMENT OF ENVIRONMENTAL PROTECTION

DIVISION OF ENVIRONMENTAL QUALITY JOHN FITCH PLAZA, CN027, TRENTON, N.J. 08625

November 15, 1985

Mr. James R. Hulm Vice President Solvents Recovery Service of New Jersey 1200 Sylvan Street Linden. New Jersey 07036

REFERENCE:

Permit and Certificate Application Log Number 85-2880 - Cooling Towers

Dear Mr. Hulm:

We have completed our review of the referenced permit and certificate application for the installation and operation of an air stripping operation. The review indicates that the total potential emission rates of eight toxic volatile organic substances and the total volatile organic substances (VOS) do not comply with N.J.A.C. 7:27-17.4 and N.J.A.C. 7:27-16.6, respectively. Also the proposed equipment does not incorporate advances in the state of the art air pollution control technology pursuant to the requirements of N.J.A.C. 7:27-8.4(b).

On this basis, your permit and certificate application, log number 85-265; is hereby disapproved and any continuation of the planned installation(s) as described in your application will be contrary to the provisions of Chapter 106, P.L. 1967 (N.J.S.A. 26:2C) and subject to the penalties as prescribed therein.

Under the provisions of N.J.A.C. 7:27A-1.4(b), you are entitled to an Administrative Hearing if aggrieved by this disapproval. If aggrieved, you must make written application to the Department within twenty (20) days from receipt of this disapproval.

If you should have any questions in this matter, please feel is me at 609-984-3027.

Very truly yours,

Milton P. Polakovic

Assistant Chief

Bureau of Engineering & Technology

dmo

c: W. O'Sullivan

A. Edwards

W. Hart

CERTIFIED MAIL





SOLVENTS RECOVERY SERVICE OF NEW JERSEY, INC.

1200 BYLVAN STREET : LINDEN, N. J. 07036

PHONE: (201) 862-2000

February 26, 1986

Director, Division of
Environmental Quality
Department of Environmental
Quality
State of New Jersey
CN 027
Trenton, New Jersey 08625

Dear Sirs:

On February 12 and 14, 1986 the NJDEP was notified of a minor odor release at the Solvents Recovery Service of New Jersey, Inc. plant, 1200 Sylvan Street, Linden, New Jersey 07036. The incidents were reported to Mr. Simecsak.

The first incident occurred on Wednesday, February 12, 1986 at approximately 2200. The plant shift foreman, Mr. Robert Tobias, called the NJDEP to report an air release from the distillation column (T-20) for approximately two (2) minutes. The unit was processing dimethyl acetamide at the time which has a characteristic fishy odor. Corrective action taken was immediate shutdown of the distillation column. At the time of the incident it was determined that the cause was due to a leak in the line from the vacuum system to the scrubber. The leak was repaired and the column put back into operation the following morning.

Following the call to Mr. Simecsak, Mr. Joseph Depierro, NJDEP inspector called the plant and was given the same information.

The second report followed a visit by the Linden City Police Department who were investigating an odor complaint in the southeast part of Linden. The shift supervisor toured the plant

SOLVENTS RECOVERY SERVICE

Director, Division of Environmental Quality Page 2 February 26, 1986

perimeter with Officer Brook without detecting any odor. We were at the time processing dimethyl acetamide. A mild odor could be detected within the narrow confines of the processing area.

Sincerely yours,

Ulusse F Marini
U. F. Marini

Manager of Manufacturing

UFM:dap

DEPARTMENT OF HEALTH COUNTY OF MIDDLESEX, NEW JERSEY

417 DENNISON STREET HIGHLAND PARK, N.J. 08904 (201) 328-8100



LASZLO SZABO, MEG. U.



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November 16, 1984

3639

TO: Mr. J.R. Hulm
Vice President
Solvents Recovery Service of N.J.
1200 Sulvan Street

City of Linden

AIR POLLUTION CODE OF

1200 Sglvan Street Linden, New Jersey 07036

VIOLATION EXISTS AT THE PREMISES

HOWN AS:

S.R.S. 1200 Sylvan Street Linden, New Jersey

DEAR SIE:

Linden, New Jersey An investigation or inspection by Agency personnel was conflicted at the noted above on $\frac{11}{133}$. The investigation or inspection disclosed that a

premises noted above on 11/1/34. The investigation or inspection disclosed that a violation of Section 6.1 (see below) of the Air Pollution Control Code Ordinance of the City of Linden the Plant, predominantly from the area of Still #22, which was being utilized to process DMAC, between 8:35 A.M. and

11:45 A.M.

This violation makes you liable to prosecution under the ordinance cited. This notice should not be construed as to relieve you from liability under the aforementioned ordinance. A separate offense shall be deemed committed on each day during, or on which, a violation occurs or continues. You are therefore requested to take those necessary

steps to c	orrect this condition.
	SECTION: The investigation or inspection discloses
the causa open air	ation, suffering, allowing, or permitting to be emitted into the substances in such quantities as did result in air pollution.
Specifica	ally: Fishy/Amine Type Odor
This n	otice shall be regarded as a warning notice provided that the violation does ntinue or recur.
☐ This v	iclation is being processed for legal action in Municipal Court.
☐ This v Contro	iolation is being forwarded to the New Jersey Bureau of Air Pollution 1 for a violation of N.J.A.C. 7:27 et. seq. section
Other:	Stringent monitoring of the perimeter of your facility must be instituted to prevent a recurrence of this type violation. No further warnings will be issued on fugitive occurs from your facility.

Asserbed Crainence Coccion to

C# 946-84-3-5, Inspectors Wastowski & DeSousa

T 14



State of New Jersey DEPARTMENT OF ENVIRONMENTAL PROTECTION

DIVISION OF WASTE MANAGEMENT
HAZARDOUS SITE MITIGATION ADMINISTRATION
CN 028, Trenton, N.J. 08625

MARWAN M. SADAT, PE

JORGE H. BERKOWITZ, PH D. ADMINISTRATOR

MEMORANDUM

T0:

Robert Kunze, Senior Env. Specialist, SEU

FROM:

Robert Hayton, Env. Specialist, SEU 24

SUBJECT:

Solvent Recovery Service Air Monitoring Data

On May 1, 1984, the writer, accompanied by Anne DeCicco, arrived at Solvent Recovery Service, Inc., Linden, New Jersey to obtain air monitoring data in and around the warehouse area. Skies were clear, temperature was 65°, and the wind was out of the northwest at 15-25 mph. The attached map shows the warehouse gridded off into 25 foot squares. Readings were taken in each square at chest height, and again at ground level, using an HNU Photo Ionization Detector (PID) with a 10.2 probe and a span setting of 2. As the map indicates, most of the readings in the warehouse area were between 5.9 and 6.2. Elevated readings were obtained on the side closest to the drums and process area. On occasion the PID would peak out to the top of the scale and then drop fairly quickly. This was due to the wind passing pockets of process fumes past the probe. The background readings taken around the periphery of the facility were generally around 5.2. Elevated readings were obtained downwind, again due to the process fumes. Additional readings were taken approximately 1/2 mile upwind and 1/2 mile downwind, and at the Linden Airport which is adjacent to the facility. The exact locations are attached.

HS69/rc

0f	f site PID Readings were taken at the following locations:
1.	Corner of Sylvan and Rt. 15.9-6.4
2.	Linden Airport5.4
3.	Corner of W. 19th St. and S. Stiles St
4.	Rear of Facility in parking lot next to woods
5.	West Elizabeth St. in parking lot of Fogel Stationary

[5.2] office 7.5 files of soi! TAIK FACO 5.4

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SOLVENTS RECOVERY SERVICE OF NEW JERSEY. INC.

1200 SYLVAN STREET : LINDEN, N. J. 07036

PHONE: (201) 925-8600

Mr. Lee Pereira
Assistant Director
Solid Waste Management
State of New Jersey
Dept. of Environmental Protection
John Fitch Plaza
Trenton, New Jersey 08625

The Designation

Ref: Memo - Lee Pereira to Solvents Recovery Service

Dear Mr. Pereira:

The information requested in the referenced memo is as follows:

(a) Carleton H. Boll, President (Director) 1200 Sylvan Street Linden, New Jersey 07036

> James R. Hulm, Vice President 1200 Sylvan Street Linden, New Jersey 07036

Margaret B. Woods, Assistant Sec./Treas. 1200 Sylvan Street Linden, New Jersey

(b) SRS, INC. 1200 Sylvan Street Linden, New Jersey 07036

100% of SRSNJ, INC.

80% of SRS, INC. Held by Carleton H. Boll

- (c) (
- (d) 0
- (e) Three (3) spill incidents as follows

 11/11/74 Spill 400 gallons Xylene
 \$350.00 settlement

Attachment



5/22/75 Spill - 100 gallons contaminated ground water. \$3,000 settlement.

11/27/78 Spill - dimethylaniline in wash water \$150.00 settlement.

Also enclosed are:

- 1. Notes on our facility operations, a flow diagram and location sketch.
- 2. The most recent copy of our Bureau of Hazardous Waste Facility Inspection Forms.

Our reason for sending these enclosures is to clarify our mutual understanding of that area and those operations at our plant covered by our T.O.A.

Solvents Recovery Service is primarily a toll processor of used solvents. In the course of this processing we generate a residue falling within the definition of "Hazardous Waste". We also provide a disposal service for a number of customers blending their waste streams with our distillation residues to produce a "residual fuel".

While your inspector's general observation of overall plant conditions are of concern to us, we would like to point out that only those areas of our plant in which we receive manifested wastes, blend and ship them, is covered by our T.O.A.

Please call me if you need further clarification.

Very truly yours,

I Shill

James R. Hulm Vice President

JRH/wp Enc.

MEMO

NEW JERSEY STATE DEPARTMENT OF ENVIRONMENTAL PROTECTION

TO Ronald T. Corcory		
FROM David Sweet	DATE	APR 1 2 1979
SUBJECT Enforcement Actions by DWR Against SWA Special Waste	Facilities	

MS&E staff has analyzed the list of special waste facilities you provided. We recommend that the Office of Hazardous Substances Control also be contacted for enforcement histories dealing with spills.

The facilities which have an enforcement history in this Division are listed below, together with a summary of the enforcement action. If further information is required, do not hesitate to telephone me at 292-0580.

- 1. Inland Chemical Corporation (6714 D) Inland Chemical has an illegal surface water discharge which was discovered by MS&E staff March 6, 1979. Lab results of this discharge show COD of 1290 ppm, BOD of 858 ppm, and methylene chloride of 23 ppm. Housekeeping is generally very poor and spillages are common. A directive letter is being prepared to eliminate their discharge and to completely pave the plant site if housekeeping practices are not improved. I recommend that Solid Waste include the same type of conditions. For further information, including photographs, contact Ed Post at 292-0686.
- Marisol Incorporated (1211 B) The groundwater beneath Marisol's site is heavily contaminated. This groundwater is used as non contact cooling water by Marisol, and then discharged to the Raritan River. Marisol only recently applied for a NPDES permit for this discharge which contains:

Benzene Chloroform Trichloroethane Tricholoethylene Tertrachlorethylene Toluene Xylene Methylene Chloride		5750 3136 6000 2610 5000 433	ppb ppb ppb ppb
Methylene Chloride	•	3500	ppb

EPA sampling has also confirmed this result. It is suspected that Marisol is at least partially responsible for the groundwater contamination. Investigations on the source of groundwater contamination are now taking place.



- 3. Rollins Environmental Services (0809 D) Solid Waste Administration should already be familiar with this case through participation on the Task Force.
- 4. Solvents Recovery Service (2009 C) Solvents is one of the worst water polluters in this State. Sample results of their effluent, reported by the Company themselves. are as follows:

	Min.	Avg.	Max.
BOD		13,033 ppm	
TOC	2540 ppm	7,413 ppm	11,100 ppm
Chlorinated Hydrocarbons	2.79 ppm	42.97 ppm	102.26 ppm
Oil & Grease	l ppm	26.8 ppm	55.4 ppm

EPA's original permit did not cover these pollutants. The permit is being revised, and major enforcement effort will be directed against the Company at that time.

- 5. Standard Tank Cleaning (0901 B) Currently in litigation.

 DEP is trying to get Company to install abatement. DAG

 Stoller is handling the case.
- 6. Chemical Control Corporation (2004 B) Facility Closed.
- 7. Lightman Drum (6436 A) Action taken by OHSC against the Company for spills. Please contact them for details.
- Scientific Chemical, Carlstadt (0205 A) Had a spill January 19, 1979. MS&E sampled, with the results showing significant concentrations of toxic organics chloroform, benzene, trichloroethylene, tetra chloroethylene, toluene, zylene, methyl ethyl ketone, MIBk and styrene. Case was turned over to OHSC for enforcement.

cc: Assistant Director Bellis

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NEW JERSEY STATE DEFOR ANT OF ENVIRONMENTAL PROTECT

TO	File	-	
FROM	Frank Gagliano	DATE	April 25, 1979
SUBJECT_	Solvent Recovery Service - Linden, New Jersey		
			

Sit in April 17

PURPOSE:

To review the facility relative to the SPCC Plan submitted March 22. 1979, by Solvent Recovery Service, Sylvan Street, Linden, New Jersey.

PERSONS CONTACTED:

James R. Hulm - General Manager Joseph A. Rossi - Operations Engineer

BACKGROUND:

Solvent Recovery Service's primary activity involves the recovery of solvents including mineral spirits, toluenl, xylenes, and ketones via distillation, gravity phase separation, and phase separation by salting out.

S.R.S. presently reports two effluents. One consists of process wastewater which eventually flows into the Arthur Kill from King's Creek. The second consists of storm water drainage which flows into Morris Creek then to the Arthur Kill.

In order to comply with the limitations set forth in their NPDES permit, S.R.S. will submit to the State an engineering report and complete final plans and specifications for the required treatment works by March 31, 1979. Construction will begin on or before June 30 and be completed by December 31, 1979.

DISCUSSION:

A review of the company's SPCC Plan revealed the following:

- The Plan is not certified by a registered Professional Engineer as per 112.3(d) and 112.5(c).
- The Plan does not include a prediction of the direction, rate of 2. flow, and total quantity of oil which could be discharged from the facility as a result of a major failure as per 112.7(b).
- The truck loading/unloading areas are not protected by vehicular departure warning devices as described by 112.7, e, 4111.
- Records of inspections were not included as part of the SPCC Plan as required by 112.7(e)8.

CONFIDENTIAL

- 5. Volumes of tanks and dimensions of dikes have not been supplied so that the effectiveness of the dikes can be determined.
- Tank truck loading/unloading areas are not discussed in enough detail to determine the appropriateness of the design.
- The SPCC Plan addresses only the fuel oil tank except 7. where, on Page 1 of the Plan, "In-Plant Control Measures", the pronoun "this" was corrected to read "these" leading one to believe reference was being made to any and all tanks in the facility.
- The SPCC Plan does not address the handling of product via 8. rail car and any secondary containment measures at this site pursuant to 112.7(e)(4).
- The SPCC Plan does not include information on other petroleum 9. product storage tanks and process areas in the facility.
- The drum storage areas are not addressed in the SPCC Plan.

SITE INSPECTION:

An inspection of the Linden facility on April 17, 1979 revealed the following:

- The drum storage area in the plant was not protected with any means of secondary containment. Drums were observed to be dented, rusted, and some had holes with leaking material. Some drums were on their sides, or leaning against other drums at an angle. An open drum containing a solvent odor producing liquid was observed beside the service road in the facility.
- 2. Recovery area tank farm had an earthen dike extension of the block wall which appears to be used as a lagoon for a solvent. The impermeability of this area is suspect posing a potential hazard to the groundwater system.
- 3. Tank truck bodies were observed to be parked throughout the facility. Their contents were reported to be unknown at the time of the tour. No secondary containment was provided at these sites.
- 4. The shallow service road perimeter runoff ditch was oil stained at the time of the inspection. It flows into an adjacent swampy area.
- 5. Stains on the service road were noted throughout the facility.
- A ditch outside the fence line on the southeast side of the plant 6. CONTRACTOR property was noted to contain a green liquid of unknown origin.

- 7. The floor of the concrete diked areas was observed to have substantial cracking.
- 8. It is likely that a tank truck failure while unloading could result in product flowing onto adjacent grounds as well as into the diked areas of a tank farm.
- 9. The rail tank car area is not provided with a means of secondary containment.
- 10. It was reported that the Linden-Roselle Sewage Authority receives discharge from S.R.S. consisting of water from the distillation process and brine solvents containing calcium chloride.
- 11. The separation pits and separators at the facility did not appear to contail noticeable quantities of water. However, they did contain a deep red liquid with associated solvent odors.

FG: jdm

CONTRACTOR

J7)

PHONE. (201) 925-8600

August 8, 1900

Mr. Charles Johnson Environmental Engineer Division of Water Resources MJ Dept. of Environmental Protection P.O. Box CN029 1474 Prospect Street. Trenton, NJ 08625

Dear Mr. Johnson:

At your visit in our plant on July 31, 1980 we reviewed the result: that you had obtained on the water samples taken on 6/11/00 cm. compared them with the results we received on the duplicate supply : from New York Testing Laboratories. At your request I am action by copies of these test results. I am also attaching a copy of the plot plan of our plant that locates the three test wells which cur sampled.

Our discussion on each of the samples and the actions that we we take were as follows:

Sample #1 - storm sewer in plant parking lot. High levels of contamination were reported in this sample. It was noted that a the time the sample was taken that there was no flow in that design branch since this was the storm drain from the plant parking los and there had been no rainfall in several days. We indicated that there was a possibility that contamination resulted from seepage through the sandplug that we had used to isolate that part of coplant drainage system from the drain connection in one of ca product storage tank dyke areas. We agreed we would dig out to end of the drain pipe, clean out the sandplug, flush the drain live to clear it and replace a cement plug. We would then sample the run-off from the plant parking lot during a rain storm.

Sample #2 - This was the sample taken in the dykad ale. adjacent to our crude tanks, again the level of contamination the high. We noted that this was a static condition and that we have plans to close the dyke around our crude tanks in such a way that we no longer were connected with this dyked area. At that time would level the earth berm surrounding that dyke and determine an appropriate means of disposal for any earth that was removed.

Sample #3 - this was taken from our well #1 on the north side of the plant. This had a strong solvent odor, showed a relatively

500

high level of chlorides and the presence of some organics. The level of concentration of the organics is such that we satisfy the we should investigate any data we have that might be used to infer flow.

Sample #4 - was from our well #3 at the southeast side of the plant. This showed very low levels of contamination and considered potentially acceptable as a groundwater sample.

Sample #5 - was taken from SRS well #2 at the southwest corner of the plant. A limited sample was taken since the well did not recharge on bailing. The small sample was split between the FDP and SRS and tested only for COD and Chlorides. The COD level was high and considerably different between the DEP analyses and the New York Testing Lab analyses.

The inferences that could be drawn from the samples taken from the three plant wells were discussed. Data was taken at the time the wells were drilled on casing elevations and water levels. Water level data was taken when samples were taken on 6/6/80 and again on the visit in 7/31/80. We agreed that we had insufficient background to evaluate this information adequately and it was suggested and agreed upon that Solvents Recovery Service would retain a Hydro Geologist to look at the data that we had on record, review it with a Geologist from DIP, and make recommendations as to what any future steps in our course of action should be. SRS agreed to advise the DIP when they had discussed the information with their Geologist and at that time the DEP would arrange a meeting.

Very truly yours,

A. Marie

James R. Hulm Vice President

JRH/wp Enclosures

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William Commence			\sqrt{V}	
Cremins Seau 75	TREAM OR WAST	EPARTMENT OF HE	Time & Date Received	
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Sample No. <u>C-27113</u>		Composite Period		VI. <u></u>
		Collected by	TARLEY & C. JOHA	18674
Municipality LINGEN		Residual Chlorine:		· · · · · · · · · · · · · · · · · · ·
	Y SERVICE OF N. J., I'M	lmmediate		
	1 SERVICE OF THE JAP			· · · · · · · · · · · ·
Stream	AN 1703. ST	Flow Rate		 :
		Temperature	051. /250.	
Description and Remarks:	From STORM WA	IFI CHICH BY	ASIN (NEEL WELL	<u> </u>
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			JJE 1 3 785	-
				•
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Odor (cold)	Suspended Solids	Grease & Off	VVC. SCAN	Ppb:
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pH	Total Solida	Chromium Total	Hiptorie	21 14
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Alkalinity to pH 4	Total PO4	Ortho - PO.	Il describer stante	

Cofor (units)	IV Chi	W. Chlorid. Sulfate					_		Her De	trimino	miaction i		
Odor (cold)	Suspended Solids				Grease & Oil			VVC. SCAN					
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LODE										1	<u> </u>		

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Chem-25	RSEY STATE DEPA	ATER ANALYSIS	Time & Date Received
Sept. 75		Fr ton	Lab No.
PLEASE TYPE OF PRINT WITH BALLPOINT FEN	FIELD INFOR	Date of Collection —	19 <u>- 19 - 19 - 19 - 19 - 19 - 19 - 19 -</u>
Sample No. <u>C-27112</u>		Composite Period 6	RAB Interval
Municipality LINDEN Plant SOLVENTS RECOVERY SE	RULE OF N. J, IN	Immediate _ Developed _	
Stream	<u> </u>	Flow Rate	
Description and Remarks: From		Temperature OON NEAR CRYP	E TANKS
Dilutions Requested (Bacteriological) Coliform MPN/100 ml. Fecal Streptococci:MPN/100 ml.	LABORATORY BACTERIOL	RESULTS	
CHEMIC	CL AND PHYSICAL ANAI	_YSES (mgs./liter, unless oth	Potter 0.1 Mars erwise noted or passing at 8 6.72
Color (unit:)	hloride 12	Sulfate	Other Determinations
Odor (cold) S	uspended Solids	Grease & Oil	VV.O. SCAN PAPP
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pH T	otal Solids	Chromium Total	1,2 dichlososthere 1
Acidity to pH 4 A	sh	Chromium Hex:	trich12208/2012/201
	otal PO4	Ortho - PO4	towers 21
	BAS	Copper	letzichiozellile
 	nenols	Lead	Chlare brozens
	op 3436	Arsenic	ethyl terzence
	on	Zinc	n 0 x 10.18

Field D.O. Seed Required: Lab. D.O. Yes No PLEASE CIRCLE Sample Conc. % 0.2 0.5 2.0 5.0 10 75 160 0.1 1.0 23 50 BOD5

propy benzene 8.4 1,2dichlorobrazene 160 - xylene.
incsitylene 53 butylbenzene 8.8 NONANC
EIOCHEMICAL OXYGEN DEMAND (mgs./liter) kum ene.

193

MEMO

TO	Ron Corcory, Spil		
FROM	Frank Gagliano, G	D.H.S.C.	DATE September 9, 1980
SUBJECT _	Solvent Recovery	Service of New Jersey	, Inc.

A joint inspection was conducted at the subject facility on August 21, 1980 by representatives of the Bureau of Hazardous Waste and the Office of Hazardous Substances Control.

Persons Present:

James R. Hulm - Facility Manager, SRS
Joseph Rossi - SRS
Ron Fisher - SRS
Chuck Elmendorf - Bureau of Hazardous Waste
Tom Downey - Bureau of Hazardous Waste
Kevin Gashlin - Bureau of Hazardous Waste
Frank Gagliano - Office of Hazardous Substances Control
Phil Cole - Office of Hazardous Substances Control

Inspection:

- 1. The reconditioned drum storage pad along the south perimeter fence is a concrete, uncurbed area sloped towards the fenceline.
- 2. Hazardous Waste Inspector, Kevin Gashlin brought my attention to an area adjacent to the main drum storage pad. Here it was observed that the soils were a mixture of substances which may be the result of many years of runoff from this pad. It had the odor of a mineral spirits like substance.
- 3. Adjacent to the transformer pad is a buried fuel oil tank. The area is heavily stained around the transformer pad apparently from one or more overfill incidents in the past. The tank is reportedly out of use although some product remains in the tank.
- 4. There is an old partially buried 1,000 gallon incinerator tank just west of the transformers. This tank is also abandoned but is full of rainwater. A light sheen was noticed on the surface of this water.
- 5. An employee was observed shoveling contaminated sorbent into a steel drum in the drum storage area. This was the result of a leaking ink drum from Sun Chemical in Patterson.
- 6. The dike area No. 2 contained an opaque colored liquid material of several thousand gallons. Mr. Hulm-explained that this area will be upgraded beginning in 10-12 weeks when delivery of new tanks for this tank farm is planned. It is the facility's intention to have Browning Ferris Industries, Elizabeth, remove all sludge and soils from this area when tank installation is imminent.

Colvent Recovery Servi (Continued)

- 7. There was evidence of a very recent spill within the column tank farm in the north east corner of the facility. On and around the concrete pads of tanks #'s 300 and 301, it was observed that a spill had recently occurred. There were puddles of a reddish solvent on the gravel bottom in the area of this tank farm. The impermeability of this tank farm is questionable. Mr. Hulm, at the time of this observation said he had no reports of any incidents in this area and he did not know what the contents of the tanks were. It was later learned at the debriefing, that the contents of T301 was toluene.
- 8. Denatured alcohol was observed dripping onto the ground from the valve coupling of tank #90.
- 9. There was a flatbed tractor-trailer on the premises next to the drum pad. It had approximately 72 drums for delivery. Some drums were marked "Chemic 1 Debris". Placards denoting "Flammable Liquids" were seen. Some drums marked "Chlorethene" were also observed. The drums were manifested (#44266) from Tempel Division, Big Three Industries, Inc., South Plainfield N.J. The truck is operated by Narrows Carriers.
- 10. A puddle by Tank 73 was observed to have a sheen, source unknown.
- ll. From visual evidence, Tank 77 appears to have had a discharge via its pipeline of unknown volume. This conclusion is based on liquid present in the mouth of the pipe, and a "washout" beneath the pipe apparently caused by a liquid flowing from it.
- 12. Heavy stains and puddles of colored liquids were noted throughout the column tank farm.
- 13. Tank 73 is reportedly out of service due to a steam coil failure.
- 14. During the pre-inspection meeting, Kevin Gashlin produced, for my information, laboratory analysis of June 11, 1980 water samples from SRS. The storm water catch basin outside the office building had concentrations of toluene at 16, 578 ppb and benzene at 1,753 ppb.

Recommendations:

- 1. The liquid in dike area #2 (lagoon) has persisted since April 17, 1979. No effort has been made to remove this material during this period. This material should be removed immediately and all contaminated soil disposed of.
- 2. All drum storage areas should have a means of positive secondary containment (curbs) or appropriate controlled drainage.
- 3. All contaminated soil throughout the facility should be removed and replaced with impermeable material.

Solvent Recovery Services for New Jersey, Inc. (Continued)

- 4. The buried fuel oil tank next to the transformer pad should be expitied and cleaned if it is indeed out of service as reported.
- 5. The soils around the aforementioned fuel oil tank should be excavated to clean soil and disposed of properly.
- 6. The column tank farm should be upgraded to include replacement of existing material with an impermeable liner and adequate diking.
- 7. Due to the extensive evidence of chronic spill incidents and careless operational procedures, it is recommended that the facility install strategically located monitoring wells to determine the extent of ground-water contamination. This is also based on the evidence provided in the laboratory analysis of water samples from the facility.
- 8. A DPCC/DCR Plan should be prepared by the company for this facility.

1 Pu FINA

MEMO

NEW JERSEY STATE DEPARTMENT OF ENVIRONMENTAL PROTECTION

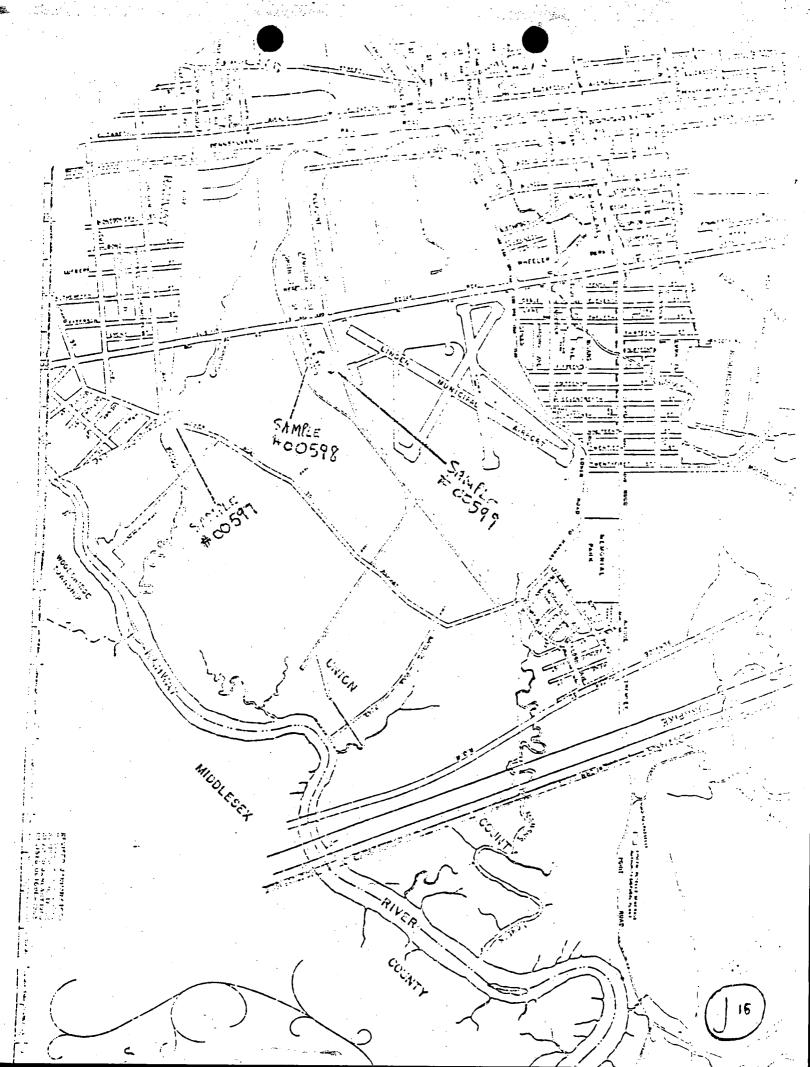
то	Gary Allen and John DeFina, Division of Hazard Management and	
	James Mumman - Region II, Enforcement Bill Honachefsky, Supervisor, Emergency Response DATE October 8, 1981	
FROM _	Bill Honachefsky, Supervisor, Emergency Response DATE October 8, 1981	
CUDICO	compliance monitoring Unit	•
SUBJEC.	SOLVENTS RECOVERY FIRE, LINDEN, NJ - OUR FILE # ER-30-81	

I am enclosing for your file and/or follow-up a tabulation of all analytical results of water samples collected by my Unit on October 1, 1981 in the above referenced case. Should you have questions please feel free to contact me at your convenience at (609) 292-0427.

WH:eh

Attachment

cc: Jeff Gove, Public Information, Commissioner's Office Bob Runyon, Chief Asst. Director Clark



TABULATION OF ANALYTICAL RESULTS OF WATER SAMPLES COLLECTED AT

Solvents Recovery, Inc. Linden, N.J.

(In parts per Billion) Unless specified otherwise.

Volatile Organics	(Kings Creek) 00597	(Site Runoff) 00598	(Contained Runoff Tank Farm) 00599
Methylene Chloride (priority pollutant) 1,1,1, Trichloroethane (priority pollutant) Trichloroethylene Toluene (priority pollutant) Ethyl benzene (priority pollutant)	3705 13931 743 421 575 869 165	19884 1126 961 1713 907	1914 49 39 36530 1280 1253 1646
N-Prophlbenzene 1,3,5 Trimethylbenzene 1,2,4 Trimethylbenzen p-Dichlorobenzene m-Xylene 1,2 Dichloroethane (priority pollutant) 1,3 Dichloropropene (priority pollutant) Benzene (priority pollutant)	308 304 618 – 805	1700 460 577 3136	266 2020 859
Petroleum Hydrocarbons T.O.C.	9.2 ppm 361.8 ppm	16.0ppm	40.9 ppm

Wm. Honachefsky Supervisor ERCOM Unit

P. O. BOX 124 . LINDEN, NEW JERSEY 07036

PLANT LOCATION: 5005 SOUTH WOOD AVENUE, LINDEN, N. J.

PHONE 201-862-7100

GEORGE GORDON, Chairman MICHAEL J. CERRA, Vice-Chairman JOHN A. ZIEMIAN, Secretary ANDREW STOFFA, Treasurer CAMP, DRESSER, McKEE, INC., Engineers RAYMOND G. TOMASZEWSKI, Attorney JEROME A. FREDERICK, Executive Director DONN A. SNYDER, Business Manager

December 3, 1981

Solvents Recovery Service, Inc. 1200 Sylvan Street Linden, New Jersey 07036

Attn: James R. Hulm Vice President

Dear Mr. Hulm:

Enclosed please find the results of effluent monitoring at Solvents Recovery Service, following the information sent to you on June 11, 1981.

Very truly yours,

Claire Baruxis

Chemist

CB/lfp encl.

P. O. BOX 124 . LINDEN, NEW JERSEY 07036

PLANT LOCATION: 5005 SOUTH WOOD AVENUE, LINDEN, N. J.

PHONE 201-862-7100

GEORGE GORDON, Chairman MICHAEL J. CERRA, Vice-Chairman JOHN A. ZIEMIAN, Secretary ANDREW STOFFA, Treasurer

CAMP, DRESSER, McKEE, INC., Engineers RAYMOND G. TOMASZEWSKI, Attorney JEROME A. FREDERICK, Executive Director DONN A. SNYDER, Business Manager

Solvents Recovery Service, Inc.

December 3, 1981

To Whom This May Concern:

Testing of your effluent discharge indicates the following violation or violations of the ordinance of the City of Linden and Borough of Roselle entitled, "An Ordinance to Fix and Prescribe Regulations, Conditions and Restrictions as to Connections With and Use of Sewers and Prescribing Penalties for Violations".

*Denotes violation.

MUNICIPAL ORDINANCE LIMITATION	YOUR SAMPLES
pH: between 6.0-9.0	See attached.
Suspended: 600 mg/L Solids	Violations on 1 of 14 days tested. 6/30/81 - 19 mg/17/14 - 196 mg/1; 7/15 - 36 mg/1; 8/18 - 360 mg/1; 8/19 - 810 mg/1; 8/20 - 512 mg/1; 9/8 - 24 mg/1; 9/9 - 36 mg/1; 9/23 - 5 mg/1; 10/14 - 136 mg/1; 10/15 - 16 mg/1; 11/4 - 8 mg/1; 11/5 - 8 mg/1; 11/6 - 15 mg/1.
Total Solids: 2,000 mg/L	Violations on 6 of 13 days tested. 6/30/81 - 1713mg/7/14 - 3,960 mg/l; 7/15 - 11,448 mg/l; 8/18 -41384mg/8/19 - 4,228 mg/l; 8/20 - 4,576 mg/l; 9/8 - 564 mg/l; Cont'd.
Biochemical Oxygen Demand: 600 mg/L	Violations on 8 of 9 days tested. 7/14 - 3120 mg/1; 7/15 - 10,200 mg/1; 8/18 - 7.380 mg/1; 9/8 - 2520 mg/1
Chemical Oxygen Demand: 1,000 mg/L	Violations occurred on 12 of 14 days tested. 6/30 - 404 mg/l; 7/14 - 3,673 mg/l; 7/15 - 13,469 mg/l; 8/18 - 14,070 mg/l; 8/19 - 9,292 mg/l; 8/20 - 10,800 mg/l; 9/8 - 3,889 mg/l; 9/9 - 1,414 mg/l; 9/23 - 6060 mg/l; 10/14 - 34,542 mg/l; 10/15 - 7,200 mg/l; 11/4 - 1150 mg/l; 11/5 - 750 mg/l; 11/6-1.765 mg/l.

P. O. BOX 124 . LINDEN, NEW JERSEY 07036

PLANT LOCATION: 5005 SOUTH WOOD AVENUE, LINDEN, N. J.

PHONE 201-862-7100

GEORGE GORDON, Chairman MICHAEL J. CERRA, Vice-Chairman JOHN A. ZIEMIAN, Secretary ANDREW STOFFA, Treasurer CAMP, DRESSER, McKEE, INC., Engineers RAYMOND G. TOMASZEWSKI, Attorney JEROME A. FREDERICK, Executive Director DONN A. SNYDER, Business Manager

Solvents Recovery Service, Inc.

December 3, 1981

To Whom This May Concern:

Testing of your effluent discharge indicates the following violation or violations of the ordinance of the City of Linden and Borough of Roselle entitled, "An Ordinance to Fix and Prescribe Regulations, Conditions and Restrictions as to Connections With and Use of Sewers and Prescribing Penalties for Violations".

*Denotes violation.

MUNICIPAL ORDINANCE LIMITATION	YOUR SAMPLES
pH: between 6.0-9.0	
Suspended: 600 mg/L Solids	
Total Solids: 2,000 mg/L	9/9 - 540 mg/l; 9/23 - 2,445 mg/l; 10/15 - 376 mg/l 11/4 - 492 mg/l; 11/5 - 460 mg/l; 11/6 - 521 mg/l.
Biochemical Oxygen Demand: 600 mg/L	1
Chemical Oxygen	
Demand: 1,000 mg/L	

P. D. BOX 124 . LINDEN, NEW JERSEY C7036

PLANT LOCATION, 5005 SOUTH WOOD AVENUE, LINDEN, N. J.

PHONE 201-662-7100

GEORGE GORDON, Chairman MICHAEL J. CERRA, Vice-Chairman JOHN A. ZIEMIAN, Secretary ANDREW STOFFA, Treasurer CAMP, DRESSER, McKEE, INC., Engir RAYMOND G. TOMASZEWSKI, Atto JEROME A. FREDERICK, Executive Dire DONN A. SNYDER, Business Man

Solvents Recovery Service, Inc.

December 3, 1981

To Whom This May Concern:

Testing of your effluent discharge indicates the following violation or violations of the ordinance of the City of Linden and Borough of Rosells entitled. "An Ordinance to Fix and Prescribe Regulations, Conditions and Restrictions as to Connections With and Use of Sewers and Prescribing Penalties for Violations".

*Denotes violation.

MUNICIPAL ORDINANCE LIMITATION	YOUR SAMPLES
ph: between 6.0-9.0	Violations occurred on 9 of 11 days monitored. 6/30/81 - 1 of 23 readings in violation, at pH 9.7
8/18/81 - 15 of 23 reading 8/19/81 - 12 of 24 reading 8/20/81 - 19 of 23 reading	compliance; 7/15/81 - All readings in compliance; gs in violation, at pH range of 9.1 - 10.3; gs in violation, at pH range of 9.2 - 12.3; gs in violation, at pH range of 9.1 - 10.7; colation, at pH 10.3 and 9.1;
9/9/81 - 18 of 21 reading 9/23/81 - 3 of 24 reading 10/14/81 - 9 of 24 reading 10/15/81 - 3 of 25 reading 11/04/81 - All readings in 11/05/81 - 1 of 25 reading	gs in violation, at pH range of 9.1 to 10.3; gs in violation, at pH range of 9.3 to 9.7; gs in violation, at pH range of 9.1 to 10.0; gs in violation, at pH range of 9.1 to 9.3; compliance; gs in violation, at pH of 9.2;
10/15/81 - 3 of 25 reading 11/04/81 - All readings in 11/05/81 - 1 of 25 reading	s in violation, at pH range of 9.1 to 9.3; compliance:

P. O. BOX 124 . . LINDEN, NEW JERSEY 07036

PLANT LOCATION: 5005 South Wood Avenue, Linden, M. J.

PHONE 201-862-7100

GEORGE GORDON, Chairman MICHAEL J. CERRA, Vice-Chairman JOHN A. ZIEMIAN, Secretary ANDREW STOFFA, Treasurer

Cleman Hebe

CAMP, DRESSER, McMEE, IMC., Engineuro RAYMOND G. TOMASZEWSKI, Attorday JEROME A. FREDERICK, Exeputive Director DONN A. SNYDER, Eddiness Manuaco

August 4, 1982

Solvents Recovery Service of New Jersey, Inc. 1200 Sylvan Avenue Linden, New Jersey 07036

Attention: J.R. Hulm, Vice President

Dear Mr. Hulm:

On May 7, 1982 the Linden Roselle Sewerage Authority advised you that because of the excessive discharges from your plant to the Authority's facilities, you were to cease and desist placing any material in the sewage system prohibited by Municipal Ordinance.

Since that date, we have become increasingly and extremely disturbed by continuing violations of Ordinance limitations by your operation, specifically, a significant violation occurred on July 22, 1982 when a grab sample revealed extremely high values far in excess of Ordinance limitations.

As a result of continuted violations, you are advised that the Authority must begin preparations for formal action to insure the cessation of such discharges and the prosecution for violations of the Municipal Ordinance.

A copy of our laboratory analysis of the July 22, 1982 sample is attached.

We are also increasingly disturbed by the possibility that the type and nature of your effluent could disable our entire treatment process. We have strong evidence that this has already occurred.

August 4, 1982 Page 2-

If our plant becomes disabled and we are unable to treat wastewater properly, the Authority could be subject to fines levied by other governmental authorities, and result in other costs and damages. In this event, you are advised that the Authority will look to your company for reimbursement for any fines or damages that we may sustain.

The Authority requests a meeting at the earliest possible time (before our August meeting) to discuss these problems and your plan of action.

Very truly yours,

THE LINDEN ROSELLE SEWERAGE AUTHORITY

George Gordon Chairman

GG:mk encl.

cc: NJDEP

RESULTS OF LABORATORY ANALYSIS FOR

18V. Fr	DATE VIS	17201 7/22/82
PARAMETER	RESULTS*	REMARKS
pX	10.67	Viels tage
TOTAL SUSP. SOLIDS		
TOTAL SOLIDS		
C.O.D.	13339	vielation
B.O.D5	4 845	violation violation
CHLORIDES		
CYANIDES		
AMMONIA (NH3-N)		
NITRATE & NITRITE (-N)		
O-PHOSPHATE (-P)		
TOTAL PHOSPHATE (-P)		
OIL & GREASE		
PHENCLS		
SULFIDES		

*ALL RESULTS ARE REPORTED IN mg/L, EXCEPT FOR pH.

THE PH RESULTS ARE IN PH UNITS.

RCRA INSPECTION FORM

refer a stebated for:	
Generator 🔀	
Transporter 📈	
HHM (TSD) facility 📈	
Copy of report sent to the facility 📈	•
	•
	Facility Information
Name:	Salvent Recovery Service of N 3
Address:	1200 Sulvan St.
	Linker
County:	llnia
•	NJ7002152897
Date of Inspection:	
	Participating Personnel
State or EPA Personnel:	Tom Downing N'SDUP
	Linda Zaninelli NSALP
Facility Personnel:	Uli Mauni
· ·	Ron Figh.
Report Prepared by Name:	Ton Downer
Agency:	NTDER
	609-292-9592
Approved for the Director by:	•

Date of Inspection 1/2//5%

NOT FOR RELEASE TO COMPANY, PROTECTED INFROMATION

Summary, Conclusions ar	nd Recommendations	•		• •
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EE Sunnyside Elvd/Plainview, New York 11803 (516) 349-0050 39 Main St. P.O. Box 657/Chatham, New Jersey 07928 (201) 635-1010

Reply To: Plainview, my

May 19, 1983

Mr. James R. Hulm, Vice President Solvents Recovery Service of New Jersey, Inc. 1200 Sylvan Street Linden, New Jersey 07036

> Re: Remedial Action and Prevention Measures Program

Dear Mr. Hulm:

During our meeting with Messrs. Charles Maack and Walter Samsel of the New Jersey Department of Environmental Protection, Division of Water Resources, on April 22, 1983, ERM-Northeast, Inc., on behalf of Solvents Recovery Service of New Jersey (SRSWJ), Inc., proposed a program of remedial action and prevention measures dealing with ground water contamination at the SRSWJ facility. Enclosed is a report formally describing the proposed program.

The proposed program consists of the following major actions:

- 1. Upgrade and harden tank farm piping
- 2. Pave tank farm and other active plant areas
- 3. Construct warehouse for hazardous waste storage
- 4. Install a bedrock production well and an associated hydraulic verification and monitoring system
- 5. Continue monitoring of existing observation well network.

This program has been designed to provide a comprehensive long-term solution to ground water contamination problems at SRSNJ. The implementation of this remedial action plan is intended to hydraulically preclude the off-site migration of

27

Mr. James R. Hulm Solvents Recovery Service of New Jersey, Inc. Page 2 May 19, 1983

ground water and prevent future spills from infiltrating and reaching the water table. Specific remedial actions are discussed in detail below.

1. | Ungrade and Karden Tank Farm Pining

Currently, the transfer of solvents between tank farm and process area is accomplished using flexible hoses. Connections are not made over impermeable surfaces. In the past, spills have been associated with the transfer of solvents from the tank farm.

SRSNJ is planning on replacing all flexible tank farm piping with hard, secure pipes. All piping between tank farm and process area will terminate in a central location on an impermeable surface. All connections will be made over a drip pan. Spills and line drainage will be contained and collected within the pan and pumped back to the tank farm.

-Construction contracts for this project have already been signed by SRSNJ and work has begun. In addition, all tank truck loading and unloading will be on impermeable surface.

2. Paving of Tank Farm and Process Area

To prevent the infiltration of accidentally spilled solvents, the tank farm area and other process areas are going to be paved. When this work is complete, all of the active plant areas where spills can occur will be impermeable. To increase the effectiveness of the paving, the paved base of the tank farm will be pitched to a central collection trough. Faving of the SRSNJ facility will be done concurrently with the upgrading of the tank farm piping. The construction costs associated with these two plant improvements (paving and piping) is expected to exceed \$100,000.

Mr. James R. Hulm Solvents Recovery Service of New Jersey, Inc. Page 3 May 19, 1983

3. Construct Warehouse for Hazardous Waste Storage

Druns containing solvents are currently stored cutside on concrete pads. Troughs with earthen floors separate the concrete pads and serve as gutters to collect rain water and solvent spills. Infiltration through the troughs is a source of ground water contemination at the site.

To upgrade the storage of drums of hazardous materials, SRSNJ plans on building a secure warehouse (100' x 100'). The warehouse will have an epoxy-lined concrete floor and a concrete outh surrounding the building to contain potential spills and to provide the containment required under NJDEP regulations. Drum leakage will be collected by floor drains and will flow to an exterior steel tank. The building will also be equipped with fire fighting apparatus that is automatically triggered in the event of a. fire. The construction of the warehouse will effectively prevent future drum leakage from reaching ground water beneath the site.

SRSNJ is ready to begin immediate construction of the warehouse. The Planning Board has approved the project. Drawings were submitted to NJDEP on December 4, 1982 for its approval. Approval has not yet been granted.

Installation of a Bedrock Production Well and Eydraulic Verification System

Ground water beneath the SRSNJ site has been shown to contain concentrations of various organic compounds. To recover the contaminated ground water and prevent .off-site migration of entrained constituents, it is proposed that a continuously pumped bedrock production well be installed. It is intended that the well discharge will be sufficient to create a cone of depression in the Brunswick Aquifer and in the overlying glacial

till then will hydraulically contain the

Mr. James R. Hulm Solvents Recovery Service of New Jersey, Inc. Page 4 May 19, 1983

> The exact location, depth and pumping rate of the well cannot be specified at this time. Eased on avail-Eble data, it is anticipated that the well will be sixinches in diameter and between 50 to 100 feet deep. Nemickes (Geology and Ground Water Rescurces of Union County, New Jersey, 1976; U. S. Geological Survey Water Rescurces Investigation 76-73) cites a median specific capacity of 1.7 gpm per foot of drawdown for six to eight inch wells in the Brunswick Formation. Assuming this figure is roughly valid at SRSNJ, well yields of 50 gpm to 75 gpm would be possible.

The production well site will be selected based on the results of a fracture trace analysis and updating ground water contour and quality data. The fracture trace analysis will utilize existing serial photographs of the SRSNJ site to identify surficial expressions of bedrock fractures or joints. A well located within a fracture or joint trend will yield greater quantities of water and will more effectively control ground water flow across the site. The collection of syneptic ground water samples and water level measurements will more accurately define the local ground water gradient and current contaminant transport pathways to select the rell site. (Resampling of existing wells and an on-going monitoring program is discussed in detail in the next section).

Following the selection of a site, the production well borehole will be drilled. The productivity of the drilled strata will be the most important factor in determining if the borehole can successfully be used as a production well. The air rotary method of drilling will be used because the water producing capability of the borehole can be readily evaluated while the hole is being advanced. An additional advantage of air rotary drilling is its rapid rate of progress in bedrock; a 100-foot borehole can easily be completed in one day. If the borehole is found to yield insufficient quantities of water two options will be available: the bore-

hole can be element for them on the t

Mr. James R. Hulm Solvents Recovery Service of New Jersey, Inc. Page 5 May 19, 1983

After a viable production well has been drilled, the hydraulic verification network will be installed. Until the production well site is selected, the exact number, depth and location of the verification monitoring wells cannot be specified; however, as many existing wells as possible will be utilized for verification to minimize the number of new wells drilled. It is anticipated that at least one new bedrock monitoring well will be required.

A pump test will be conducted using the production well and the verification wells. It is anticipated that the test will be 24 to 48 hours in duration.

The collected drawdown information will be used to determine aquifer parameters. The hydraulic effectiveness of the recovery system will be initially estimated using the pump test data.

Treatment of the production well discharge will be accomplished through air stripping in SRSNJ's existing cooling towers. The treated ground water will be discharged to the Linden-Roselle sewerage system. Numerous studies have shown that air stripping is an effective method for removing volatile organic compounds from aqueous solutions. Removal rates have been reported to exceed 90%. Influent and effluent samples will be collected to determine the effectiveness of air stripping at SRSNJ.

The recovery and treatment systems will be operated on a trial basis for 30 days. During this period, water level measurements will be collected and the hydraulic effectiveness of the production well evaluated. The efficiency of the treatment system will also be determined. During start-up operations, temporary pumps, piping and electrical connections will be used. At the end of the 30-day trial operation, the collected

Mr. James R. Hulm
- Solvents Recovery Service
of New Jersey, Inc.
Page 6
May 19, 1983

data will be analyzed and the successful operation of the system verified. Permanent pump, piping and electrical systems will then be designed and installed at the conclusion of the start-up period.

5. <u>On-going Monitoring Programs</u>

As previously mentioned, synoptic water level measurements and ground water samples will be collected from the existing monitoring wells to assess current ground water conditions and to help select the production well site. Additionally, SRSKJ will institute a ground water quality monitoring program on a quarterly basis. Samples will be collected from both new and existing wells and analyzed for a selected group of indicator parameters. This will permit an evaluation of water quality trends at the site and will document the effectiveness of the ground water recovery program. SRSKJ will use in-house laboratory facilities for all analytical work.

SCHEDULE

A series of subtasks are necessary to complete the installation and start-up of the production well recovery system. The proposed schedule for their completion is shown in Figure 1. It is anticipated that the production well can be installed on a temporary basis in 75 days; a total of eight months will be required to complete the permanent installation of the recovery and treatment system.

The ground water monitoring program will begin with a comprehensive resampling of the existing observation wells. This will take place within 30 days after initiation of this program (as soon as SRSNJ lab facilities can be upgraded). Thereafter, ground water samples will be collected on a quarterly basis and analyzed for an agreed upon group of indicator parameters.

Very truly yours,



State of Rem Berseu

DEPARTMENT OF ENVIRONMENTAL PROTECTION DIVISION OF WASTE MANAGEMENT

HAZARDOUS SITE MITIGATION ADMINISTRATION CN 028, Trenton NJ 08625

MARWAN W SADAT PE D-RECTOR

JORGE H BERKOWITZ PH D ADMINISTRATOR

MEMORANDUM

NOV 2 2 1985

TO:

FRANK COOLICK, CHIEF

BUREAU OF HAZARDOUS WASTE ENGINEERING

THROUGH: DR. MERRY L. MORRIS, CHIEF

BUREAU OF ENVIRONMENTAL EVALUATION AND RISK ASSESSMENT

Dept. Environmental Protection Division Winto: Resources MVO Servicial Water Olincharde Permits

FROM:

MARJA VAN OUWERKERK, ACTING ASSISTANT CHIEF

BUREAU OF ENVIRONMENTAL EVALUATION AND RISK ASSESSMENT

SUBJECT: SOLVENT RECOVERY SERVICE, INC. (SRS) PART B PERMIT

We understand you will shortly be issuing the Part B RCRA permit for the SRS Linden facility. As you know we have been involved in site investigation and cleanup activities at this facility in the past. These activities were required under Administrative Consent Orders. The amended ACO of October 1983 requires site soil investigation and, where warranted, cleanup activities. It has been determined that it is in the Department's interest to include additional site soil investigation requirements in the Part B permit. The following scheme has been designed with known site conditions in mind.

Previous analyses of site soils has indicated exceedingly high contaminant levels of volatile organics and petroleum hydrocarbons. In addition, high levels of PCBs have been found in the warehouse area. Those materials in the warehouse have been removed and properly disposed of at a TOSCA facility. The additional areas of concern now are those where prior analyses have indicated total volatile organic concentrations exceeding 10 parts per million. In those areas it will be necessary to analyse for base/neutrals, acid extractable compounds and PCBs. A 50 foot grid should be set up in areas that have permeable ground cover. Borings should be performed of the center of all end grid locations and every other internal grid. Each boring should go down to the clay layer or 30 inches whichever comes first. Two samples should be obtained at the zero to twelve inch depth. This sample should be obtained from the interval of 18"-30" or 18" - clay layer whichever comes first. This sample should be analyzed for volatiles organics, base/neutrals and acid extractables if base/neutrals and acid extactables were found in the shallow depth sample. PCBs should also be analyzed if they were found in the shallow sample.

All analytical results should be submitted to the Department. Upon review of the data a determination can be made regarding the need for remedial action to address soil contamination at this site.

Ground water recovery is mandated through the amended ACO as well. Thomas Seckler of NJGS will provide input to your permit regarding his requirements for monitoring and construction of the ground water recovery system. If you should have any questions regarding our requirements, please do not hesitate to contract me at 3-6801.

HS75:td

Dr. Marwan Sadat, DWM
Dr. Jorge Berkowitz, HSMA
M. Coopersmith-Gray, BSM
John Dickinson, ORS
Tom Seckler, NJGS
Bob Patel, HWE
Kenneth Elwell, DAG



State of Rem Jersey

DEPARTMENT OF ENVIRONMENTAL PROTECTION DIVISION OF WASTE MANAGEMENT

HAZARDOUS SITE MITIGATION ADMINISTRATION CN 028, Trenton, N.J. 08625

MARWAN M SADAT PE DIRECTOR

JORGE H. BERKOWITZ, PH D. **ADMINISTRATOR**

MEMORANDUM

MAY - 9 1986

TO:

SRS FILE

FROM:

DAVID VAN ECK

SUBJECT: SITE VISIT, SRS, LINDEN

On 2 May 1986, the writer and Kenneth Kloo (NJDEP/DWM/HSMA) accompanied inspector Josephine Glore (NJDEP/DWM/METRO REGION) on a weekly RCRA compliance inspection of the Solvents Recovery Service (SRS) facility in Linden, New Jersey. At 11:00 a.m. we were led by Ron Fisher, Plant Superintendent of SRS on the site visit.

We surveyed the facility with a Photovac TIP type photo ionization detector. Several areas displayed high readings, 100 and 160 ppm read as benzene. attached site map for readings and locations)

The drum storage warehouse construction is nearly complete. Currently, drums are stored outdoors on concrete pads with no secondary containment. The TIP indicated some soil contamination. Awaiting transfer to a landfill were drums labeled D008, waste containing lead.

Between the fuel blending and recovery units, ambient air registered over 100 ppm (as benzene) and smelled of pyridine. An open drainage pipe was noted at the southeast corner of the secondary containment wall by tank 13 of the fuel blending area. The gases from this stain ionized quickly and flashed readings on the TIP above 200 ppm.

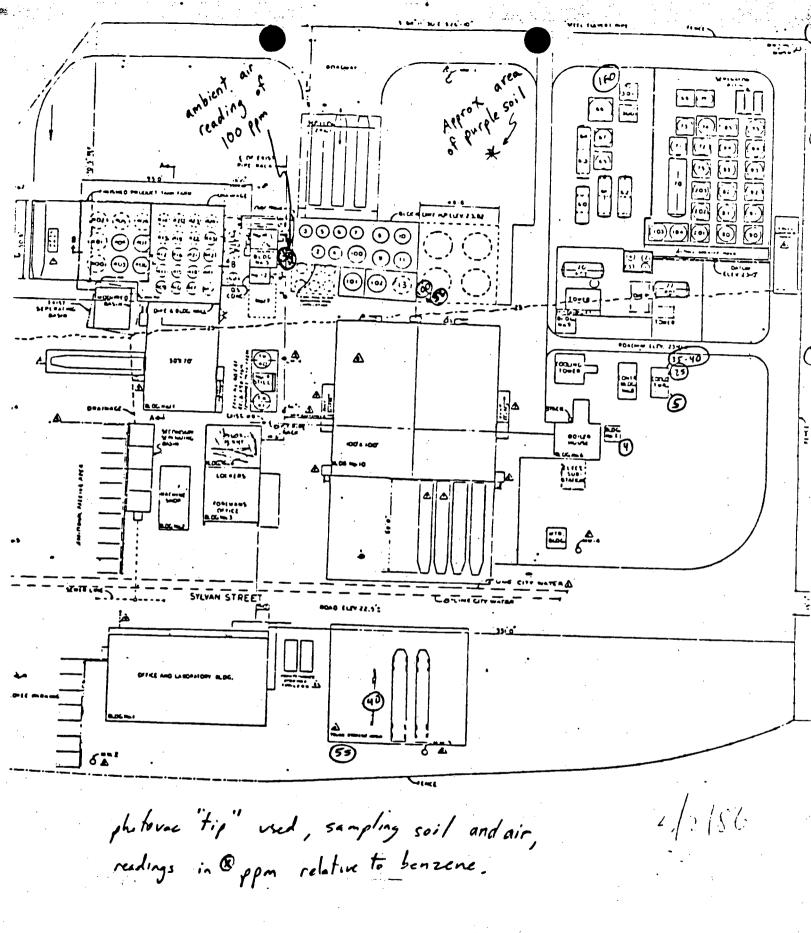
Mr. James Hulm, SRS vice president, and Mr. Fisher said the "lagoon" adjacent to the fuel blending area was actually a fire dike, soil berms mounded to comply with fire codes. They maintained that the area received no effluent and was not hazardous.

To the north east of the above mentioned lagoon location, a small area of purple stained soil was observed.

Most of the rainwater runoff from the site is contained by primary and secondary setting basins which skim off solvents that float to the top. This permitted discharge goes to the Linden-Roselle Sewage Authority. Prior to release, the effluent is tested for its chemical oxygen demand (limit 3400) and pH (allowable range 6-9). The south east section of the property discharges runoff directly into Kings Creek. As that part of the site has had no industry, the state determined it needed no discharge permit. Runoff from the drum storage area may carry contamination and become included in this discharge.

HS |6|:1mk

c: Josephine Glore (DWM/METRO REGION)
w/attachment



David Vantck NJDEP-DWM-115MA

37

Teb =01-3083-1165 ERM-Northeast Es Surnyside Blvd. Plainview, N.Y. 11803

Attention: Mr. Craig Werle

PURPOSE AND RESULTS

Bight (8) well water samples taken from SES-NJ on 8/24/83 were submitted to York Laboratories for analysis of volatile organic compounds.

The samples were shallyzed by EPA-Method 624-Purge and Trap. GC/MS.

The results of the analysis follow on Table I.

Prepared by: Gaul D. Sprid
Chemist

Attachment
YORK
Laboratorias

TABLE 1

01-3083-1165

ERM-Northeast

Compound	Well #2	We 1.1 #3	We 1.1	Well	Well	We 11	Well	well
chloromethane	<10.0	<10.0	<10.0	15	# 5R	# 1)	#7	#33
bromomethane	<10.0	- \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	<10.0	<10.0	<10.0	<10.0	<10.0	<i0.0< td=""></i0.0<>
vinyl, chloride	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	KIU.U
chloroethane	17.12	<u> </u>	<10.0		<10.0	<10.0	<10.0	<10.0
methylene chloride	12,680	<10.0	<10.0	437.7	906.3	<10.0	<10.0	190.8
trichlorofluoromethane	<10.0	<10.0	<10.0	1,404,423	1,373,214	<10.0	36,330	142.5
1,1-dichloroethene	1,961	68.19	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
1,1-dichloroethane	3,064	112.7	91.69	166.1	812.9	<10.0	513.0	<10.0
trans-1,2-dichloroethene	63,648	<10.0	4,498		281.9	<10.0	<10.0	1,667
chlorotorm	609.6	<10.0	<10.0	17,340	151,040	<10.0	3,598	3,34.1
1,2-dichloroethane	6,059	<10.0	198.4	475.4	2,078	<10.0	2,155	<10.0
1,1,1-trichloroethane	4,027	<10.0	<10.0	794.3	8,137	<10.0	<10.0	615.5
carbon tetrachloride	<10.0	<10.0	- \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	10.0	16,549	<10.0	10,322	231.3
bromodichloromethane	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
1,2-dichloropropane	<10.0	<10.0	<10.0	1210.0	<10.0	<10.0	<10.0	<10.0
trans-1,3-dichloropropene	128.3	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.6
trichloroethene	<10.0	<10.0	65.82	99,010	<u> </u>	<10.0	<10.0	<i0.0< td=""></i0.0<>
dibromochloromethane	<10.0	<10.0	<10.0	<10.0	161,387		298,025	97.62
cis-1,3-dichtoropropene	24.01	14.76	30.57		C10.0	<10.0 <10.0	<10.0	<10.0
1,1,2-trichloroethane	14.82	<10.0	14.61	553.4	1,671	<10.0	574.0	<10.0
bonzene	339.7	222.0	452.2	116,2	4,17	<10.0	2,862	12.37
2-chloroethylvinyl ether	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	5,587	33.67
bromoform	<10.0	<10.0	<10.0	7 210.0	\$10.0		<10.0	<10.0
tetrachloroethene	<10.0	<10.0	84.31	40,527	30,899	<10.0	<10.0	<10.0
1,1,2,2-tetrachloroethane	<10.0	<10.0	<10.0	64,124			46,822	69.40
toluene	.44,577	21.08	900.0	2,921	123,547		190,723	42.01
chlorobenzene	435.6	2,401	1,640	14,106	134,247	<10.0	15,141	84.17
ethylbenzene	2,684	<10.0	189.7	117.5	467.5	<10.0	131,228	$\frac{659.7}{2}$
	······································					<u> </u>	158.9	263.7

All concentrations given in ug/1 (ppb).



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	M- Buty benzer				-			6316000	<u> </u>	
)	Carbon Tetrachicricie				360	160		i		——— į
	Chlorelarmone		85	- 2	3700	2600				
	Chicoforo		/3/50	7/22	12000	15000		20,000,000		
	Cumeno	160			2.500	11100				
, ,	Cuclopropyllogange	 :						/2700		·
;	Or Michlerobonzene	4/2						12700		[
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)	-1.1- Gichhroothene				P.3			45000		
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	61 - Dichloroethero	2300		/:::>		3/00	_		660	
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	Misthylene Chlorida		2/	01	3.1	100				
Í	Mosh the lene	<u>0.300</u>		- 1	1300000	640,000	//	·		
— j	Mr. Occay Isome			/_	7/0	3.3		20000		
-i	N-Propylbenzera Toluana				-		-	100000		
_	Tetrachloroethena	17000		370	2900	5000	-	1308000	39	
—i	12 1/2 Triple Inch	440		7/	100000	60000	1/	70,000,000		
	1,2,4-Trichlorobenzene	120		-	-	-	-	287000		
-	1.1.1 - Trichleroothone	11.00		7		3000	-	725000	-	
j	1.1.2-Trichleroethene			17	•	_3/00	· •	740000	100	
	Trichlorosthone			6.3	220000	65000	2	11000000	-10-	
¦	1, 2, 4 - Trimothy/benzone				-			7.000,000	<u>5/</u>]
[1.3.5-Tring that trazen	40		_				17:000		
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j	m-Xuloon	2002		1.70	220				<u> </u>	1
_ :	- n- Suline				-			<u> </u>		
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	SOLVENT RECOVERY SERVICE		NO	V 1.7				ng Onto:	Hag. B.	1994
	LINDEN, NEW JERSEY	#2	#.3	#4	1	· 1	}	WEL	_ <u>L</u>	NO's
			-	74	1.5	#5R	#6	#7	#3	
			İ	<u> </u>	-				CONTRACTOR OF STREET,	-
	Benzene	340								·
Ì	Carton Tetrachloride	410	332	<u> 452</u>	130	1171	< 10	0507	21/	ļ
	Chlorobenzene	435	- 4/2	4 10	× 10	410	4.10	410		·
	Chlorocthane		2401	1640	14166	134247	× 10	13/.2.28	-10	
	Chloroform	17		<u> </u>	438	906	<u>< 10</u>	4 10	655	
_	1.1- Dichloroethane	610	4/0	<u> </u>	1154	2078	- 10	.2755		·
_	1.2 - Dichloroethone	3064		9.2	6.9	୍ଟରୟ	10	410		
_	1.1 - Dichloroethene	6050	<u> </u>		47.5	8/37	4/0		16:57	<u> </u>
	trons 1,2 - Dichlorosthene	1461	68_	4/0	166	813	10	4/0	6.15	
	CIS 1, 3 - Dichloroproprine	63648		4498	17.240	151040	_ 0</td <td>5/3</td> <td>4/2</td> <td></td>	5/3	4/2	
	trans 1.3 - Dichlerapropena	24		3/	_ 410	4/0	*10	3598	2344	ļ
	Ethylbenzene	1.29		410	4/0	-10	0</td <td>574</td> <td></td> <td><u> </u></td>	574		<u> </u>
-	Methylene Chloride	2684		190	113	463	4/0	4/0	4/0	ļ
_	Toluene	13680	- 4/0	4/0	1404423	1372.214	5/0	159	2:4	
_	Tetrachloroethene	44577	-2/	200	2921	2/75/		36330	14.3	ļ
-1	L.L.I - Trichloroethane	- 10	10	94	42527	30,859	<u> </u>	1.574.1	AD	ļ
-	1 1 2 Total lass the	4027	0_</td <td>- 40</td> <td>774</td> <td>10549</td> <td><!--0</td--><td>16832</td><td>66</td><td>ļ</td></td>	- 40	774	10549	0</td <td>16832</td> <td>66</td> <td>ļ</td>	16832	66	ļ
-	1, 1, 2. Trichloroethane	1.5	3/0	/5	.553	1671	4/0	10322	23/	
	Trichloroethene	<10	410	66	99010		470	2863	/.2	
-1	1, 1, 2, 2 - Tetrachloroethore	<u> </u>	10	4/0	64124	131317	4/0	208025	<u> </u>	
						123.617	<u> </u>	1.5/4/		
	TOTAL VOLATILE ORGANICS	140310	2030	() () ()						
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File SRS

88 Sunnyside Blvd./Plainview, New York 11803 (516) 349-0050 39 Main St. P.O. Box 657/Chatham, New Jersey 07928 (201) 635-1010

Reply To: Plainview, NY

December 13, 1983

Mr. Paul Kahn
Office of Regulatory Services
N.J. Department of Environmental
Protection
CN 402
Trenton, NJ 08625

Dear Paul:

As I related to you by telephone, EP toxicity and reactivity analyses were run on the soil samples from Piles A, B and C. None of the soil samples were reactive. None of the soil samples were EP Toxic for heavy metals. EP Toxicity for pesticides still has to be determined but it is highly doubtful that the samples will be toxic. Pesticides are not, and have not, been handled at this site.

I am also attaching Tables 1 through 5 which present soils data for the five borings that were taken within the warehouse footings area. Four samples were taken at each boring location. Only priority pollutants which were in excess of 50 ppb are reported.

Very truly yours,

J. A. DeFilippi, P.E.

President

JAD/lfs

Enclosures

cc: Mr. James Hulm

(K)

78512

SOLVENT RECOVERY SLAVICE OF LINDEN, NEW JEI LABORATORY ANALYTICAL DATA BORINGS WITHIN WAREHOUSE FOOTINGS AREA

(All values in ppb)

		Fl	Fl	. Fl
	F1 0'-注'	1'-15'	2'-2½'	2½'-3'
Chloride	8,649	863	106,872	3,833
Methylene Chloride	1,027		576	
1,1 Dichloroethene	2,129		1,050	
1,1 Dichloroethane	6,677	1,034	10,372	153
Trans 1,2 dichloroethene	148	·	87	
Chloroform	3,416		13,493	
1,2 Dichloroethane	29,866	798	8,517	167
1,1,1 Trichloroethane	198,397	33,135	391,984	9,960
Trichloroethylene	867		5,859	71
Benzene	204,165	38,239	32,649	307
Tetrachloroethylene	943, 322		1,170,210	50,100
Toluene	16,346	7	2,532	
Chlorobenzene	(1,019)975	•	791)179	30,500
Ethyl benzene		1		
1,1,2 Trichloroethane				
1,1,2,2 Tetrachloroethane				
			2 1	1.1

< 50

K

SOLVENT RECOVERY SERVICE OF LINDEN, NEW JERSEY LABORATORY ANALYTICAL DATA

BORINGS WITHIN WAREHOUSE FOOTINGS AREA

(All values in ppb)

	·			
	F2 0'-½'	F2 1'-1岁'	F2 2'-2½'	F2 2{\}'-3'
Methylene Chloride	82	979	542	18,900
1,1 Dichloroethene	82		56	- -
1,1 Dichloroethane	4	81	58	866
Trans 1,2 dichloroethene	121	197	200	5,130
Chloroform				698
1,2 Dichloroethane	885	554	1,100	17,200
1,1,1 Trichloroethane	4,051	1,997	866	840
Trichloroethylene	9,364	2,104	6,140	69,500
Benzene	5,499	3,392	2,284	9,550
Tetrachloroethylene	. 680	209	3,830	41,300
Toluene	10,565	16,180	58,200	357,000
Chlorobenzene				
Ethyl benzene	8,169	3,223	52,000	246,000
1,1,2 Trichloroethane		-x	137	1,300
1,1,2,2 Tetrachloroethane				1,960
	L			

Table 3

SOLVENT RECOVERY SERVICE OF LINDEN, NEW JERSEY LABORATORY ANALYTICAL DATA

BORINGS WITHIN WAREHOUSE FOOTINGS AREA

(All values in ppb)

	F3 0'-½'	F3 1'-1½'	F3 2'-2½'	F3 2½'-3'
Methylene Chloride	631	20,423	275	1,440
1,1 Dichloroethene	5,090	28,424	52	716
1,1 Dichloroethane	775	4,354	88	1,438
Trans 1,2 dichloroethene	5,300	80,669	488	6,884
Chloroform	124	2,965		118
1,2 Dichloroethane	379	9,532	373	3,053
1,1,1 Trichloroethane	80,400	562,041	1,600	9,734
Trichloroethylene	41,200	278,452	4,540	24,456
Benzene	29,200	28,093	274	1,438
Tetrachloroethylene	57,200	116,606	2,590	5,372
Toluen e	157,000	1.598,202	88,000	187,106
Chlorobenzene .	1,060		353	4,781
Ethyl benzene	121,000	948, 244	62,800	198,844
1,1,2 Trichloroethane	375	4		417
1,1,2,2 Tetrachloroethane	4,970		1,180	

5) = 11 11 / 11.97 17 11.97 17 11.97

-- = <50

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Table 4

SOLVENT RECOVERY SERVICE OF LINDEN, NEW JERSEY LABORATORY ANALYTICAL DATA BORINGS WITHIN WAREHOUSE FOOTINGS AREA

(All values in ppb)

	F4 0'-麦'	F4 1'-1½'	F4 2'-2½'	F4 2월'-3'
Methylene Chloride	9,517	1,553	19,300	56,248
1,1 Dichloroethene	2,979	640	1,315	344
l,l Dichloroethane	326	64	877	1,519
Trans 1,2 dichloroethene			592	17,027
Chloroform	14,172	729	323	2,148
1,2 Dichloroethane		422	492	2,062
1,1,1 Trichloroethane	- 41,177	12,441	18,738	5,506
Trichloroethylen e	321		6,405	63,518
Benzene	301		929	24,366
Tetrachloroethylene	43,275	34,749	19,813	34,358
Toluene	618,698	212,100	219,653	828,563
Chlorobenzene	·		,	
Ethyl benzene	478,673	184,486	203,670	499,250
1,1,2 Trichloroethane				
1,1,2,2 Tetrachloroethane			2,703	
	1200	273	41:	, ,

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Table 5

LABORATORY ANALYTICAL DATA BORINGS WITHIN WAREHOUSE FOOTINGS AREA (All values in ppb)

	F5 0'-½'	F5 1'-1'	F5 2'-2½'	F5 2½'-3'
Methylene Chloride	77			·
l,l Dichloroethene	510			
1,1 Dichloroethane	494		· 	 ,
Trans 1,2 dichloroethene	707			
Chloroform				
1,2 Dichloroethane				
l,l,l Trichloroethane	17,004	72		
Trichloroethylene	518			
Benzen e				
Tetrachloroethylene	5,577			
Toluene	8,741	96	1,190	
Chlorobenzen e	1,805		- - -	
Ethyl benzen e	8,460	101	2,410	
1,1,2 Trichloroethane		<u></u>		
1,1,2,2 Tetrachloroethane				
		1	1	

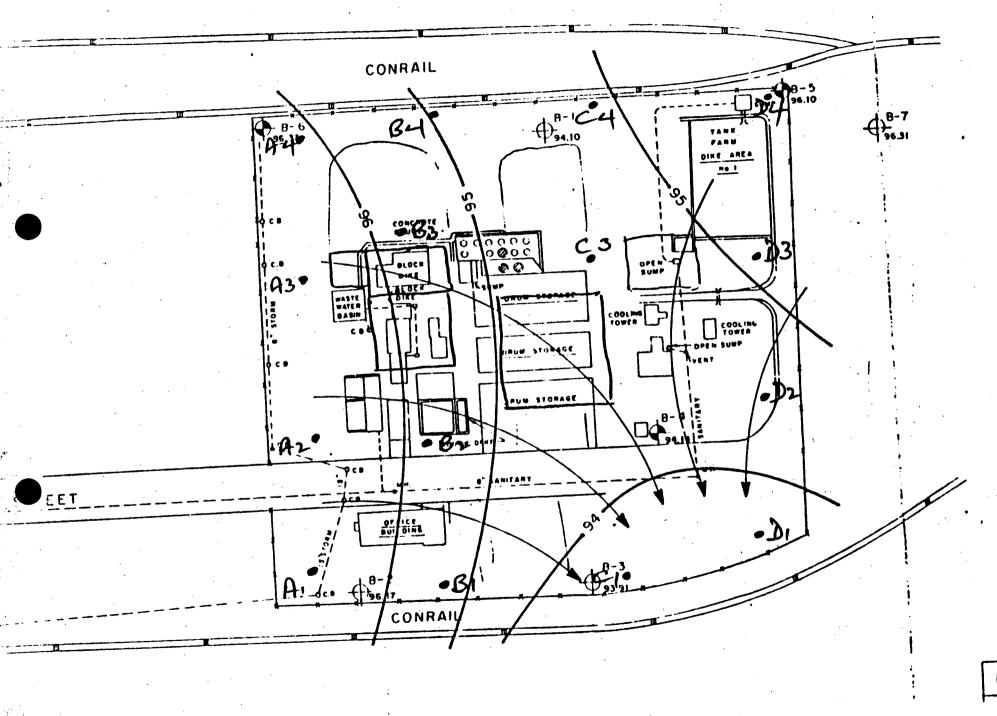
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100 974 James R. Hulm 12/22/83 Paul Kahn, Please excuse the informatily of the transfer. Here are the sample analyse of the sete one sample. I did not lik any recult at less than 100 ppb. The plot plan i my approximation of where the sample was taken

BORING

(K)

LINDEN AIRPORT



BORING

Purgeable Report (GC/MS)

sample Number:

	0.0.5	Concentration	2.1'-3
	Ion Used to Quantitate	(bbp)	Comments
ompound	τ		
hloromethane			
ichlorodifluoromethane	1		
-cmcmethane			
invl chloride			/03
hioroethane	-		/03
- Abulane chioride		T,	
-i-blorofluoromethane			536
1-dichloroethylene	+		1490
	+	T	1475
trans-1,2-dichloroethylene			
abloroform			
2 2-dichloroethane	+	T -	4020
1 1 1-trichloroethane			
earbon tetrachloride			
bromodichloromethane			
his-chloromethyl etner			
a dishipropropane			
trans-1,3-dichloro-ropene			22400
e-ichlorcethylene			
Ashronochloromethane			
air-1 3-dichloropropene			162
1,1,2-trichloroethane			165
500000			
2-chloroethylvinyl'ether			
bromoform			20100
tetrachloroethylene			·
1,1,2,2-tetrachloroethane		6210	16500
toluene	3203		1460
chlorobenzene		2160	983
ethylberzene	1351		
acrolein			
acrylonitrile			
non-priority pollutants			
xylenes			
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· CONTRACTOR OF COLUMN STATE O			
			he compound's responstogram.

X = less than





factor and/or a decrease of interferences in the sample's chromatogram.

ND = None detected; approximate sample detection level for priority pollutants ND -- None detected; approximate sample detection level

J - approximation

Purgeable Report (GC/MS)

B-3

sample Number: Station Locations.

2.5-30 0.0.5 1.25-1.75 Concentration Ion Used to Comments (ppb) Quantitate Compound chloromethane dichlorodifluoromethane bromomethane vinyl chloride chloroethane 244597 5900 methylene chloride trichlorofluoromethane 30636 9566 1,1-dichloroethylene 45872 203 4141 1,1-dichloroethane 37690 2074_ trans-1,2-dichloroethylene 3726 308 chloroform 92905 13780 1,2-dichloroethane 941137 186000 606 1,1,1-trichloroethane carbon tetrachloride bromodichloromethane bis-chloromethyl ether 1,2-dichloropropane trans-1,3-dichloropropene 281287 104000 972 trichloroethylene dibromochloromethane cis-1,3-dichloropropene 1,1,2-trichloroethane 24121 1959 benzene 2-chloroethylvinyl'ether 139762 bromoform 117000 2094 tetrachloroethylene. 2131 1,1,2,2-tetrachloroethane 1681808 461000 494 136362 toluene 25100 653431 chlorobenzene 232000 37*9* ethylberzene acrolein acrylonitrile non-priority pollutants xylenes___

X = less than

L - rore than



^{*}Concentration is lower than the approximate D.L. because of the compound's response factor and/or a decrease of interferences in the sample's chromatogram.

ND = None detected; approximate sample detection level for priority pollutants

ND == None detected; approximate sample detection level

J == approximation

Purgeable Report (GC/MS)

Sample Number: Station Locations.

	O- O.J'	1-25 -1.75 Concentration	Comments
	Quantitate	(ppb)	
ompound	T		
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		I	
ichloroditiudione		I	
-cmome thane			
invi chiorice			2815
		219	
	-		1226
t - Lincolf I dolome	598	T	4536
1 dichloroethylene	+	129 -	
		1 9/3	39~
,1-dichloroethane crans-1,2-dichloroethylene			23470
LIGHATORE		308	18170
- ALABIOTOETHERE	113	1097 -	
- ichlordetmant		T	
tetrachiorius			
- Aigh I Of Diffe Cite in			
March loromethy 1 ether			
			41000
trans-1,3-dichloropropene		1950	·
A-ichloroethylene			
Tit och lot ometnette			
- 1 2-dichloroptopenc		260	3912
1,1,2-trichloroethane			
2-chloroethylvinyl'ether			38200
L-000 6027	417	9447	2/32
- Arnehlargethviene			4630
1,1,2,2-tetrachloroethane	6259	. 48534	3,600
toluene			1870
chlorobenzene	3896	40240	
ethylberzene			
acrolein			
non-prigrity pollutants			
xylenes			
CENZENE COMPOUNDS			
C 11/4 C 2 1			
		·	
والمتعادل والمتع			

^{*}Concentration is lover than the approximate D.L. because



factor and/or a decrease of interferences in the sample's chromatogram. ND = None detected; approximate sample detection level for priority pollutants

ND --- None detected; approximate sample detection level

J = approximation X = less then

Purgeable Report (GC/MS)

Sample Number: Station Locations. 0-0.5

1.25-1.75 2.5-3.0.

Compound	Ion Used to Quantitate	Concentration (ppb)	Comments
chloromethane			
dichlorodifluoromethane			
dichiorodiliuo.om	1		• _
bromomethane vinyl chloride	+	1	
chloroethane	 		
chloroethane methylene chloride			1539
trichlorofluoromethane			
1,1-dichloroethylene	+		
1,1-dichloroethane			•
1,1-dichloroethane trans-1,2-dichloroethylene		+	
chloroform	+		
1,2-dichloroethane		1	
1,1,1-trichloroethane	+		
carbon tetrachloride			
bromodichloromethane	+		
bis-chloromethyl ether	+		
		+	
1,2-dichloropropane		+	
trans-1,3-dichloropropene		+	259
trichloroethylene dibromochloromethane		+	
cis-1,3-dichloropropene	+		
1,1,2-trichloroethane	-		
	+	+	
benzene 2-chloroethylvinyl'ether	-1	+	
promoform promoform		+	
tetrachloroethylene	+		302
1,1,2,2-tetrachloroethane		~	
1,1,2,2-tetrachioroethane toluene	643	31642	5742
chloropeuseue	8/3	88860	44 530
	3/07	579	3/0
ethylbenzene acrolein			
acrolein acrylonitrile	 	-	
acrylonitrile	+	+	
•	_	1	
cylenes			
			
	+	+	
			
			
	_1		

ND = None detected; approximate sample detection level for priority pollutants ND -- None detected; approximate sample detection level J = approximation

factor and/or a decrease of interferences in the sample's chromatogram.

X = less than

2000 15 00 36

Purgeable Report (GC/MS)

mple Number: ation Location:.

1-4

0-05

1.25-1.75

2.5/- 3.0

		1,63 - 1.7	3 2.7 - 3.0
mpound	Ion Used to Quantitate	Concentration (ppb)	Comments
loromethane			
chlorodifluoromethane	, ·		·
omomethane			
nyl chloride ·			• •
loroethane			•
thylene chloride		. 5530	607
ichlorofluoromethane			
1-dichloroethylene			
1-dichloroethane			
ans-1,2-dichloroethylene		2860.	
loroform			
2-dichloroethane			
1,1-trichloroethane			• .
rbon tetrachloride			
omodichloromethane			·
s-chloromethyl ether			
2-dichloropropane			
ans-1,3-dichloropropene			•
ichloroethylene		18800	
bromochloromethane "			
s-1,3-dichloropropene			
1,2-trichloroethane	1		7
nzene			,
chlorpethylvinyl'ether			•
omoform			· •
trachloroethylene		18300	148
1,2,2-tetrachloroethane	 	3380	• 1
luene	10~	. 28,0	ł
lorobenzene		. 28.0	121
hylbersene		714	
rolein		1	•
rylonitrile	 		· · · · · · · · · · · · · · · · · · ·
Mepriprity pollutants			
lenes	1	 	
·	 		
	 		
	 	 	
	 	 	
	 	 	
		 	
	<u> </u>	<u> </u>	· · · · · · · · · · · · · · · · · · ·

Concentration is lower than the approximate D.L. because of the compound's response actor and/or a decrease of interferences in the sample's chromatogram.

D = None detected; approximate sample detection level for priority pollutants

Dec None detected; approximate sample detection level

- less than

- ----

2 ppt
(K)

⁻ approximation



State of New Bersey

DEPARTMENT OF ENVIRONMENTAL PROTECTION

DIVISION OF WASTE MANAGEMENT HAZARDOUS SITE MITIGATION ADMINISTRATION CN 028, Trenton, N.J. 08625

MARWAN M. SADAT, P.E. DIRECTOR

JORGE H. BERKOWITZ PH D. ADMINISTRATOR

MEMORANDUM

TO:

File

THROUGH: Dr. Merry Morris, Chief, BEERA

THROUGH: KROb Predale, Assistant Chief, EE/RA

FROM:

Marja van Ouwerkerk $m_{
m V} \partial$

SUBJECT: Meeting Held on December 21, 1983 - Solvents Recovery Service, Linden, NJ

IN ATTENDANCE: Paul Kahn, ORS

Kevin Gashlin, DWM
David Schrier, DWM
Dr. Merry Morris, DWM
Marja van Ouwerkerk, DWM

The Site

The Solvents Recovery Service facility is located on Route 1 in Linden, adjacent to the Linden Airport. The facility is a permitted Hazardous Waste Treatment facility which has been in operation for a number of years. The division has been involved with the site for approximately four years. The site encompasses approximately 4 acres which include drum storage facilities and surface impoundments.

On October 1, 1981, an explosion took place at the facility's flash distillation recovery area, where upon NJDEP issued an Administrative Order. Subsequent site investigations revealed soil contamination and the company was ordered to remove contaminated soils, based on a determination by DWM that "measurable" quantities of toluene and chlorinated hydrocarbons are ,.. toxic and samples represent a spill and cleanup material would be classified as hazardous."

On July 16, 1982, an ACO was entered into which covered implementation of an improved tank farm, drum storage facilities. etc. It was eventually modified to include removal of more contaminated soil and remediation of contaminated groundwater.



The operators of the facility recently decided to construct a warehouse in one of the areas where drum storage has taken place. During preliminary soil borings for construction of the building footings, soil contamination was discovered which resulted in an investigation to determine the extent of the soil contamination. Seasonally high groundwater table elevations range between 2-1 feet below surface.

Meeting

The purpose of the meeting was to determine the type of remedial action which would be required at the site prior to the warehouse construction. A preliminary review of available groundwater and soils data indicated gross contamination in several areas including amoung numerous other volatile organics the following chemicals in soil.

36,700 ppm - Toluene
18.4 ppm - Ethylbenzene
greater than 1100 ppm - methylene chloride
316 ppm - tetrachloroethylene
299 ppm - chlorobenzene
601 ppm - trichloroethylene
14,344 ppm - oil and grease

In groundwater, the following were found among other organics,

1,300 ppm - methylene chloride
100 ppm - tetrachloroethylene
220 ppm - trichloroethylene

It was determined that with analyses for other site locations it would not be possible to determine required remedial actions, therefore pending NJDEP evaluation of these results no further decisions would be made, however removal of contaminated soil would most likely be required. A concern was voiced regarding construction worker exposure to volatiles and the possible need for a worker health and safety plan.

Review of additional data received December 24, 1983

Review of additional soils data of 15 borings in areas other than the warehouse in grid pattern down to 3 feet depth reveals the following:

Borings around the perimeter at the northern section site show no or low contamination (generally up to 3 ppm total Priority Pollutant purgeables at 0-0.05 and 1.25-1.75 ft. depth).

High concentrations were found in the three borings in the central part of the facility, with highest concentrations at the 2.5-3 ft. level of up to:



941 ppm - 1,1,1-trichloroethane

285 ppm - trichloroethylene

1,682 ppm - toluene

136 ppm - chlorobenzene

653 ppm - ethylbenzene

These levels are generally lower than those found in earlier borings in the proposed wathouse area.

Subsequent memos between Paul Kahn and David Schrier thus far have resulted in a determination by DWM that "an acceptable organic contaminant level of 700 ppm per volatile organic compound is agreeable to the Bureau" (Dave Schrier).

Three foot diameter borings will be conducted in the warehouse area on a 20 foot grid, down to 3 feet to determine which soils are to be removed.

Conclusions

If 700 ppm per volatile organic is used to designate hazardousness, only two of the warehouse borings at levels of 0-1/2 and 2-2 1/2 for F1 and 1'-1 1/2' for F3 will need to be removed based on presently available data.

In addition, area of boring producing NJDEP samples TD 174 and TD 175 would need to be removed (exact location unknown at this time).

Additional areas of soil removal would include area of boring B-3 at 2 1/2' - 3' level.

Depending on the method used to composite samples from the proposed warehouse borings, it is possible that none of the soils will need to be removed i.e. if soils from upper, least contaminated strata are composited with lower, most highly contaminated strata, through "dilution".

It is not known what, if any worker health and safety plan is being used at the present time.

Recommendations

A Health and environmental assessment should be performed to determine what if any level of soil contamination is "acceptable" for the site.

A site air monitoring program should be considered, to determine the impact of soil excavation activities and possible worker health and safety protection requirements.



Pile Page 4

A detailed site map indicating structures; boring and monitoring well locations should be prepared to facilitiate data interpretation.

Coordination is required between ORS, DWR and involved Bureaus of DWM to ensure proper review and decision-making regarding future site activities.

We severely question the change in determination of hazardousness which was set at measurable quantities of volatile materials (in July 7, 1983 memo of Dave Schrier) and then was changed to 700 ppm per volatile organic compound (in January 4, 1984 memo of Dave Schrier). There must be a more reasonable and consistent scientifically supportable method for determining when contaminated soils should be considered hazardous and must therefore be removed.

HS75:dr



results vents lectery septem)
of washing and by reverse of ETC for results

ETC Test Results

Dictated to Andi Leviton via telephone

ar en flan en gregoriet de la company

Volatile Organics

Detection limit 700,000 ug/l

D8400 ethylbenzene

905,000 ug/1

toluene

1,630,000 ug/1

trichloroethylene 848,000 ug/1 Others were below detection limit

SW-4

SW-6

None were present above levels. 5 were below the detection limit

D8398

SW-8

None present Others below detection limit

D8397

(SW-5

1,1,2,2 tetrachloroethane tetrachloroethylene

8,090,000 — NOT SURE OF 1,500,000 — TRANSCRIPTION 5,260,000 as of original report

trichloroethylene

5,250,000 ج

D8396

1,250,000

ethylbenzine toluene

2,710,000

trichloroethylene

1,160,000

SW-2

no compounds with any values Others were below detection limit

D8394

SW-3

Nothing above detection limit

D8393

SW-1

Nothing above detection limit

D8392

chlorobenzene

2,580,000

tetrachloroethylene

10,800,000

trichloroethylene

1,270,000

(SW-11) (Oclow concrete)

methylenechloride

800,000

D8369

SW-10 (Below concrete)

Nothing above detection limits



ENVIRODYNE ENGINEERS

19161 Lackland Road. St. Louis, Missouri (1814) 1814] 484-9940

March 15, 1985 2086-69173

Ms. Lynne Fanjoy ETC 284 Raritan Center Parkway PO Box 7808 Edison, NJ 08818-7808

Dear Ms. Fanjoy:

Enclosed are the results of analyses of two soil samples received February 27, 1985, for 2,3,7,8-TCDD. The contents of this report are listed on the following page.

Samples G9692 and G9693 were prepared and analyzed according to the procedures described in the statement of work for dioxin analysis, September 15, 1983. The extract was subjected to additional cleanup using the carbopack column as described in the protocol. A background sample (DC004814) and a fortified field blank (DC004815N) were analyzed along with your samples. The data are reported in Table 1.

If you have any questions concerning these data, please contact me.

Sincerely,

Judith L. Stone
Data Manager

JLS/bsm Enclosure

Technical Report

for SRS LINDEN 1200 SYLVAN STREET LINDEN, NJ 07036

Chain of Custody Data Required for ETC Data Management Summary Reports

G9692 - G9693

SRS INC.

SRSLINDEN

ETC Sample No.

Company

Facility

Sample Point Date Time Hours

Denis C. K. Lin, Ph.D.
Vice President
Research and Operations

FORM B-1. TCDD DATA REPORT FORM

Revised Copy: 3-26-85

Page 1 of 1

Lab: Envirodyne Engineers, Inc.

3-15-85 Report Date:_

Case No.: 2086-69173

Relative

SP-2330 Column:

Sample Number	Batch/Ship	ment No.	: <u>G969</u>	2, 69693						Ion		S	~~*					•		FRN
Number EDb ECb (grams) Heas. D.L. I.D. Date 12mc 52mc 52mc 52mc 52mc 52mc 52mc 52mc 5					TCDD (ppb)				320/	332/	(no	3)	320_			Abundance 328ª	332	334	
DC4814 2/25 ¥ 10.0 ND 0.20 2 3/12 15:50 0.81 0.79 8.94 89 9312 176 237 2083 4891 6086 D0885	Number G9693 G9692 MB	2/27 2/27 2/27	ECP Y Y Y	(grams) 10.2 10.9	Meas. ND	0.083 0.162	2 2 2 2	3/3 3/3 3/3 3/2	13:34 13:54 10:12 20:21	2.04 1.79 0.79 1.11	0.78 0.79 0.79 0.79	9.60 9.38 9.29	96 94 93	1670 3944 84 674 9312	819 2208 107 605 11499	0 116 2190 2665	85956 2985 16250 19484	190465 6709 34208 45283	241960 8446 43350	D0757 D0746 D0733

D = Duplicate/Fortified Field Blank p = Partial Scan/Confirmatory Analysis D.L. - Detection Limit RR - Reagent Blank FRN - File Reference Number FB - Field Blank

N = Native TCDD Spike R = Rejected Data

ND - Not Detected

acorrected for contribution by native TCDD; 0.9% of m/z 322 subtracted.

hen - Extracion Date: EC - Extra Cleanup.





State of Rem Jersey

DEPARTMENT OF ENVIRONMENTAL PROTECTION

DIVISION OF WASTE MANAGEMENT 32 E. Hanover St., CN 028, Trenton, N.J. 08625

MARWAN M. SADAT, P.E. DIRECTOR LING F. PEREIRA, P.E. DEPUTY DIRECTOR

IN THE MATTER OF	,)	ADMINISTRATIVE
SOLVENTS RECOVERY SERVICE)	CONSENT ORDER
OF NEW JERSEY, INC.)	JON-2

The following Administrative Consent Order is issued pursuant to the authority vested in the Commissioner of the New Jersey Department of Environmental Protection (hereinafter "NJDEP" or the "Department") and duly delegated to the Director of the Division of Waste Management and upon the consent of Solvents Recovery Service of New Jersey, Inc. (hereinafter "SRSNJ").

IT IS AGREED that this Administrative Consent Order shall supplement and amend the Amended Administrative Consent Order (hereinafter the "AACO") between SRSNJ and the Department dated October 25, 1983, and shall supersede where inconsistent those conditions set forth at that AACO's paragraph 1(b), captioned "Warehouse Area Inside of Footings." Except as herein superseded, said AACO shall remain in full force and effect.

IT IS FURTHER AGREED that by complying with the terms of this Administrative Consent Order SRSNJ shall satisfy the preconditions of the NJDEP for construction of a proposed drum storage warehouse referred to at that AACO's paragraph 1(b), regarding soil contamination in the area inside of the footings, which precondi-



march 16, 1984, which letter is presently the subject of a contested case before the New Jersey Office of Administrative Law (OAL Docket No. ESW-08367-84), and this Administrative Consent Order shall serve as a basis for settlement of said contested case.

ORDER

IT IS THEREFORE ORDERED AND AGREED that SRSNJ, agents, assigns, successors in interest or trustee shall undertake the following measures for soil remediation in the area inside of the warehouse footings (hereinafter "the project area"), before it shall proceed to complete construction of its drum storage warehouse.

DESCRIPTION OF PROJECT AREA

- 1. The drum storage warehouse will be constructed in an area of approximately 100' x 100'. Its approximate size and location appear on the partial site diagram attached hereto as Exhibit A and incorporated herein by reference.
- 2. Footings for construction of this warehouse have already been installed by SRSNJ to an approximate depth of three feet below ground surface level and extend approximately four feet above ground surface level.
- 3. Within the footings, SRSNJ has deposited a layer of sand as clean fill on top of preexisting ground surface to a height of four feet above ground surface.
- 4. Beneath the sand, at ground level, there exists a certain 12" reinforced concrete pad which has been keyed to the

footings. The surface area of this pad is approximately 25' x 50'. Its approximate size and location appears as a dotted outline on Exhibit A, attached hereto.

5. Concrete pavement exists at other locations within the footings area beneath the sand at ground level which pavement is not reinforced and is not keyed to the footings.

DESCRIPTION OF REMEDIAL ACTION

Materials within the project area shall be dealt with in the following manner by SRSNJ:

- 6. The layer of sand previously deposited as clean fill shall be removed and staged for reuse at a location approved by and in a manner acceptable to NJDEP.
- 7. Soils beneath the 12" reinforced concrete pad and the pad itself shall remain in place. However, nothing in this determination is meant to indicate that soil with the same or similar concentrations of pollutants will be allowed to remain in place elsewhere on the site.
- 8. The non-reinforced concrete pavement will be broken up and discarded as construction debris.
- ground surface, whichever is greater. The excavation resulting from soil removal shall be backfilled with clean fill whose origin shall be approved by NJDEP.

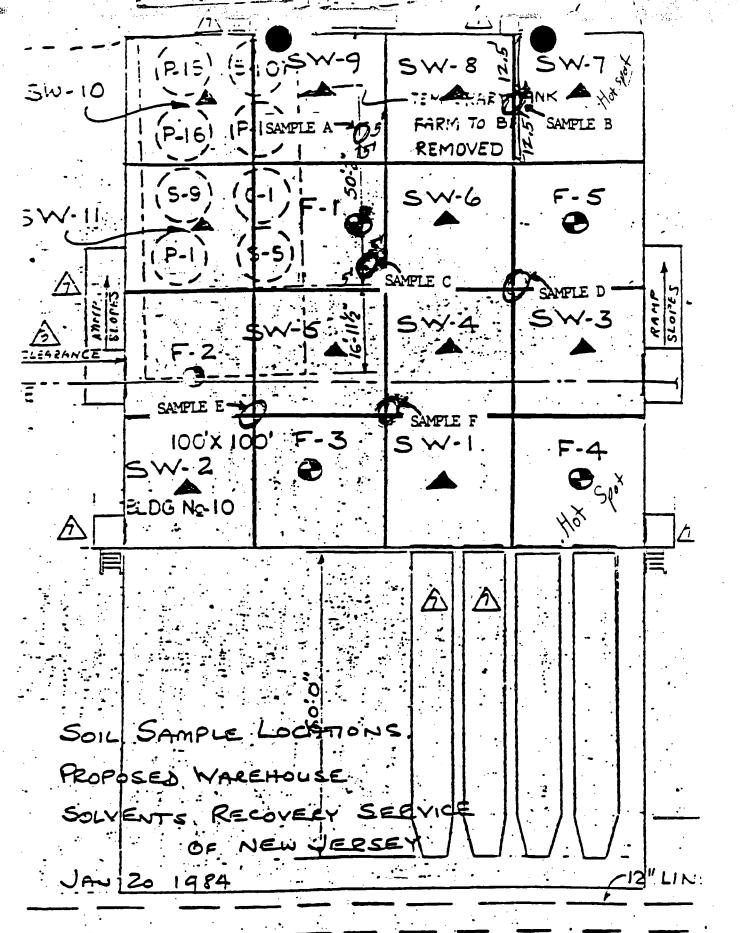
NJDEP personnel, which shall be scheduled for this purpose as soon as possible.

DATED:

Dr. Marwan M. Sadat, P.E., Director Division of Waste Management

DATED: april 4, 1985

James R. Hulm, Vice President Solvents Recovery Service of New Jersey, Inc.



LO"LINE CITY WATE

ROAD ELEV 22,5 ±

EXHIBIT A



SOLVENTS RECOVERY SERVICE

1200 SYLVAN STREET LINDEN, N. J. 07036

PHONE (201) 862-2000

August 23, 1985

Dr. Marwan M. Sadat
State of New Jersey
Dept. of Environmental Protection
Division of Waste Management
32 E. Hanover Street
CN 028
Trenton, NJ 08625

Re: Amended Administrative Consent Order

NJ DEP - SRSNJ

Dear Dr. Sadat:

Enclosed is a signed copy of the Amendment to our Administrative Consent Order reflecting excavation to the clay layer.

We have already submitted the required Groundwater Contour Map to Ms. von Ouwerkerk and will have our "as finished" section within two weeks.

Very truly yours,

James R. Hulm Vice President

jrh:l enci

cc: J. Stewart

K. Elwell

Via: Reg. Ret. Rec. Req.

It is hereby agreed that paragraph 9 of the Administrative Consent Order (ACO) between Solvents Recovery Service of New Jersey, Inc. (SRSNJ) and the New Jersey Department of Environmental Protection (NJDEP) filed April 23, 1985 with the New Jersey Office of Administrative Law shall be amended as set forth below. In all other respects said ACO shall remain in full force and effect.

9. Except as herein provided, all soils in the project area shall be excavated to the top of the clay layer found to be existing in the project area; provided, however, that areas completely excavated and backfilled prior to July 13, 1985 shall not be subject to the provisions of this paragraph.

During excavation activities, SRSNJ shall engage the services of an engineer or geologist acceptable to NJDEP to determine the depth of the aforementioned clay layer (as it relates to the ground surface) and shall also log the soil strata. This information shall be developed into crossectional drawings for the entire project area and shall be submitted to NJDEP by SRSNJ within thirty (30) days of the completion of the excavation activities. In addition, as built drawings of the excavation shall be simultaneously submitted to NJDEP by SRSNJ.

The excavation resulting from the soil removal shall be backfilled with clean fill, the source of which shall be approved by NJDEP. However, in those areas where the integrity of the clay layer has been compromised (eg., those areas surrounding the warehouse footings and central support pillars), thereby creating a potential for contaminant migration, SRSNJ shall first utilize clay backfill. In the event that the use of clay backfill does not prove feasible, SRSNJ shall, within ten (10) calendar days from completion of the excavation activities submit a report to NJDEP, for its review and approval. The report shall detail the condition(s) that prevent the clay backfilling and shall contain a recommended course of action that will best serve to prevent contaminant migration. Upon NJDEP's approval of the report, SRSNJ shall implement the approved course of action.

SRSNJ shall, furthermore, institute a ground water table measurement program. Said program shall include the measurement of groundwater table elevations in all site monitoring wells and shall also include the submission of a groundwater flow contour map. Initial water measurements shall be submitted to NJDEP within seven (7) calendar days from the effective date hereof, with subsequent measurements being submitted on a bi-weekly basis for six months. SRSNJ

shall submit the groundwater flow contour map to NJDEP simultineously with submission of initial water measurements.

Dr. Marwan M Sadat, P.E., Dir Davision of Wayte Management

Dated: 8/23/85

James R. Hulm, Vice President Solvents Recovery Service of New Jersey, Inc.

MEMO

NEW JERSEY STATE DEPARTMENT OF ENVIRONMENTAL PROTECTION

TO File through Vince Krisak		
FPOM Tinda Zanin-11:	TE July 12	, 1985
SUBJECT <u>Solvents Recovery Service of New Jersey - Soil Excava</u> Proposed Hazardous Waste Drum Storage Warehouse Area.	ation Projec	t in

On July 10, 1985 at approximately 0900 hours the writer arrived at the abovesubject location. A weekly facility inspection was conducted on-site, as well as an inspection to check excavation progress in the proposed warehouse area.

Conversation with Mr. Jim Hulm, SRS Vice President, revealed that the conclusion of the July 2, 1985 meeting with Dr. Sadat, was that SRS must excavate to a minimum of three feet. Where visible evidence of contamination is observed, excavation must continue down to the clay/meadow mat interface. The writer was aware of the former, but was previously informed that excavation was to be conducted to a minimum of four feet. The writer contacted Vince Krisak, Supervisor - BFO-Central, about this problem, and was informed that either the three foot or four foot depth would be acceptable as long as no visible evidence of contamination was observed.

Mr. Hulm requested that I witness the excavation of black (contaminated) soil in quadrants F-3 and part of SW-1. Soil will be removed an additional 16"-20" beyond the three foot depth to the clay meadow/mat interface. This area was noted in a memo dated July 3, 1985, where a test hole was dug. Mr. Hulm was anxious to backfill this area as soon as possible.

I was also informed that on July 3, 1985, Martha Coopersmith, representative from DWM-HSMA - Site Coordinator, was on-site to ascertain that the clay meadow/mat interface was visible in the warehouse area. In addition, I was given a copy of a letter (see attached), which Mr. Hulm was going to hand deliver to Dr. Merry Morris - DWM-Risk Assessment today. Attached to this letter is certification by ERM-Northeast, representative, Craig A. Werle, of site stratigraphy, verifying the existence of meadow mat directly underlain by bluish gray silty clay at a 2 to 5 foot depth in the warehouse area.

The writer was witness to a water level reading performed at well #4 adjacent due east to the warehouse area located by the boiler room. The water level was 7' 3".

ERM-Northeast representative, Mehran Bayram, conducted the measuring.

I then inspected warehouse area. Basically the south side of the warehouse consisting of quadrants SW-2 through F=4 (see attached map) have been excavated to a depth of approximately 3½-4′. Work still needs to be done on the east side consisting of quadrants SW-3, F-5, and SW-7. On the west side some rough footings work has been done on quadrants SW-5, F-1, SW-4 and SW-6. Quadrants SW-8 and partial SW-9 still need to be done.

The writer witnessed some contaminated soil excavation in the F-3 and partial SW-1 quadrant area. However, a truck arrived on-site which needed to be loaded with soil previously excavated, and this job was stopped. The writer will be on-site tomorrow when work resumes.

It must be noted that since my last inspection conducted on July 2, 1985, sixteen shipments of contaminated soil have been sent off-site for disposal. Copies of same are attached to the writer's facility inspection report of July 10, 1985. All manifests were found to be in order.

Samples & Photos:

No samples were obtained; eleven photos were obtained.

The writer secured the site at approximately 1500 hours.

FOC12:dg Enclosures 5W-10 REMOVED L SW-6 5-5 PROPOSED WAREHOUSE OF NEW YERSEY Jan 20 1984

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NEW JERSEY STATE DEPARTMENT OF ENVIRONMENTAL PROTECTION

MEMO

то	Spill File General		····
FRON	Gary M. Allen and Karl J. Delan	DATE	October 6, 1991
SUBJECT_	Solvents Recovery Services Fire,	_200 Sylvan Street, Lin	nden #81-10-1-6

On October 1, 1981 at 1930 hours our office responded to a news report of a fire and explosion at the above named facility. No formal notification from either the company or the local fire or police departments was ever received by our office. Initial phone conversation with local officials indicated that no major problems existed and that no help was necessary from outside sources, however, further phone investigations by our office disclosed that several waste solvent tank farms were involved in a fire along with several hundred finished solvent drums. Based on this additional information, a three man response team was deployed made up of John DeFina, Karl Delaney and Gary Allen.

while on route to the fire, Gary Allen had Trenton Dispatch put the Water Resources sampling team on standby along with Joe Goliszewski and the DHM mobil command post. Prior to our response teams arrival at the site, radio information received from Air Pollution units already at the scene indicated <u>large quantities of fire water runoff</u>. Based on this information, Gary Allen activated the Water Resource sampling team through Trenton Dispatch. (See Atlahant J. 1971)

At 2100 hours our response team arrived at the scene and met with Dan Barney of LPA, Mike Stroz of Air Pollution, and a representative of the Central Regional Health Department, Rich Kozub. The fire had been extinguished just prior to our arrival and there was no smoldering evident, therefore, minimizing any air pollution problem. EPA officials were suiting up to initiate an air sampling program using an HU meter and Bob Hung of our health department was walking the perimeter of the fire site obtaining carbon filter air samples. At 2115 we spoke with James Hulm, Vice President of Solvent Recovery Services. A list of the possible chemicals involved in the fire was obtained with a more complete list to follow in the morning. The solvents are as follows: MEK, MIBK, Acetone, Tolueng, Mineral Spirits, Alcohols, Esters, Ethyl Acetage, Di-ethyl Amine.

At this time, Mike Arrecco and Tony Alteri of DWR, reported that there was considerable water runoff into Kings Creek. G. Allen then directed Arrecco and Alteri with Rich Kozub accompanying to obtain water samples from the runoff into Kings Creek as well as the rear of the facility. The drainage for the site is such that all runoff is directed to a single storm sewer on Sylvan Street, which subsequently drains to Kings Creek. Mr. Hulm was questioned as to the nature of the fire and explosion. Mr. Hulm stated that there were possibly 200-55 gallon drums of finished solvents as well as two 20,000 gallon liquid bulk storage tanks also containing finished solvents which were involved in the incident.

At 2140 hours, Tom Allen was updated by G. Allen. T. Allen was informed Paul Giardina was on standby and would respond if the situation deemed necessary.

The EPA team came off-site at 2200 hours and informed the DHM team that the HNU Sampler indicated 30 ppm xylene and a trace of Di-ethyl Amine. At this time G. Allen, K. Delaney and J. DeFina entered the fire site using full face respirators equipped with organic combination filters and protective clothing. The DHM inspection showed two main

Attachment (M1)

Fire #81-10-1-6
Page Two

tank storage areas surrounded by severly cracked and leaking dikes. The integrity of these dikes would have been questionable prior to the fire as they had electrical conduit running through them in several places which were not sealed to prevent leakage.

The diked storage area towards Route 1 contained approximately eight 20,000 gallon storage tanks, two of which had their tops blown off. The Linden Fire Department had monitors trained on the remaining six tanks to cool their contents following the superheating effect of the fire. An inspection of the second diked storage area located approximately 100 - 150 feet east the first, showed that paint had been burnt off of at least two of the approximately ten 20,000 gallon tanks in this area. Further inspection of this second area showed a tanker truck hooked up to tank number "101". The trucks manifest shows the truck to contain 3000 gallons of Flammable Solvents - N.O.S. As we proceeded around to the South side of this second tank area, we observed a 20,000 gallon tank which appeared to have been blown from the first tank storage area, across 100 -150 feet of the lot, and had crushed a steel and tin storage shed.

The DHM team exited the fire area at 2350 hours and met with Ron Corcory - BHW, Joe DiPierro - APC, Tom Downey- BHW, Vince Matulewich and Wayne Smith of Criminal Justice. According to Tom Downey who is the BHW inspector for this site, the fire area is used solely for finished product storage. Downey stated that his office has had a long term involvement with S.R.S. and the location of a filled in chemical lagoon on site.

At 3020 hours on October 2, 1981 Mr. Hulm agreed to perform all necessary cleanup as deemed appropriate by John DeFina who would meet with Mr. Hulm later this morning. Extent of cleanup would in part be dependent on the results of water samples taken by the DWR sampling team.

The DHM team secured the site at 0100 hours.

GMA: KJD: dg

NEW JERSEY STATE DEPARTMENT

Memo

10	File .				
FROM	John Defina		DATE	October 6,	1981
SUBJECT_	Explosion and Fire Solvent R	decovery Systems,	Route 1 and	9 Linden,	NJ
	DHM #81-10-1-6				

October 2, 1981

1000 - I arrived on site at the S.R.S. facility in Linden. There I met with Mr. Hume, Vice-President of S.R.S., I requested that I be shown around the company property in order to make a day lite assessment of any environmental damage occurring during the previous night incident. Mr. Hume said that he could not show me the area himself, but he did direct Mr. Ulysses Marini, Plant Supervisor, to do so. I requested that Mr. Marini show me the tank farm where the fire and explosion occurred, the periphery of the entire facility, the location of all storm and sanitary sewer drains, and any areas where product accumulated and/or flowed off the property.

Examination of the back and sides of the S.R.S. property did not reveal the presence of any ground or water contamination. Almost all of the fire fighting water and spilled product flowed to the front of the property (because of a slight grade in that direction) where the material flowed into a series of storm sewer grates, which feed directly into Kings Creek. I saw little or no water and product in the tank farm area, due to the fact that the retaining dikes had many leaks and breeches. Two separator ponds were full of contaminated liquid, during the fire power was lost and the pumps that maintain these ponds failed. The excess that entered these ponds flowed to the storm sewers and into Kings Creek. In the area of the tank farm and drums where the fire occurred there was considerable surface contamination remaining. I requested of Mr. Marini that sand burms be placed around near by storm sewer openings in order to prevent further discharge into Kings Creek and proper disposal be arranged. During my inspection, Tom Downey (609-292-9377) Solid Waste arrived. Mr. Downey is quite familiar with S.R.S., I requested that he show me the point from which the storm sewer discharged into Kings Creek. At that location there was little obvious visual contamination of the stream bed. I took some soil in hand broke it up to smell it, there were some very light solvent odors detectable.

Water from the separator ponds is discharged into the Linden Roselle Sewer Authority. According to Tom Downey concentrations of restricted materials entering this system more times then not exceed levels allowable by the local sewer authority. I requested that Mr. Marini arrange for obviously contaminated water in the separator ponds be decanted and reprocessed or properly disposed of. (Note: Contact at the Linden Roselle Sewer Authority is Jerry Fredricks) Finally, I requested that S.R.S. provide our office with a list of materials involved in the fire and their amounts.

1215 - I left the site (Note: Tom Downey has taken a series of 35 mm pictures of the site and can provide us with copies.)

JD:dg

emo

6	File
FROM	John DeFina DATE October 6, 1981
SUBJECT	Initial Water Sample Results from the Solvent Recovery Systems Fire
•	DIM #81-10-1-G

October 5, 1981

1415 - Phone conversation with Tony Alterie of the Division of Water Resources. Mr. Alterie and Mike Areccio of D.W.R. were the field inspectors who took water samples the night of the fire.

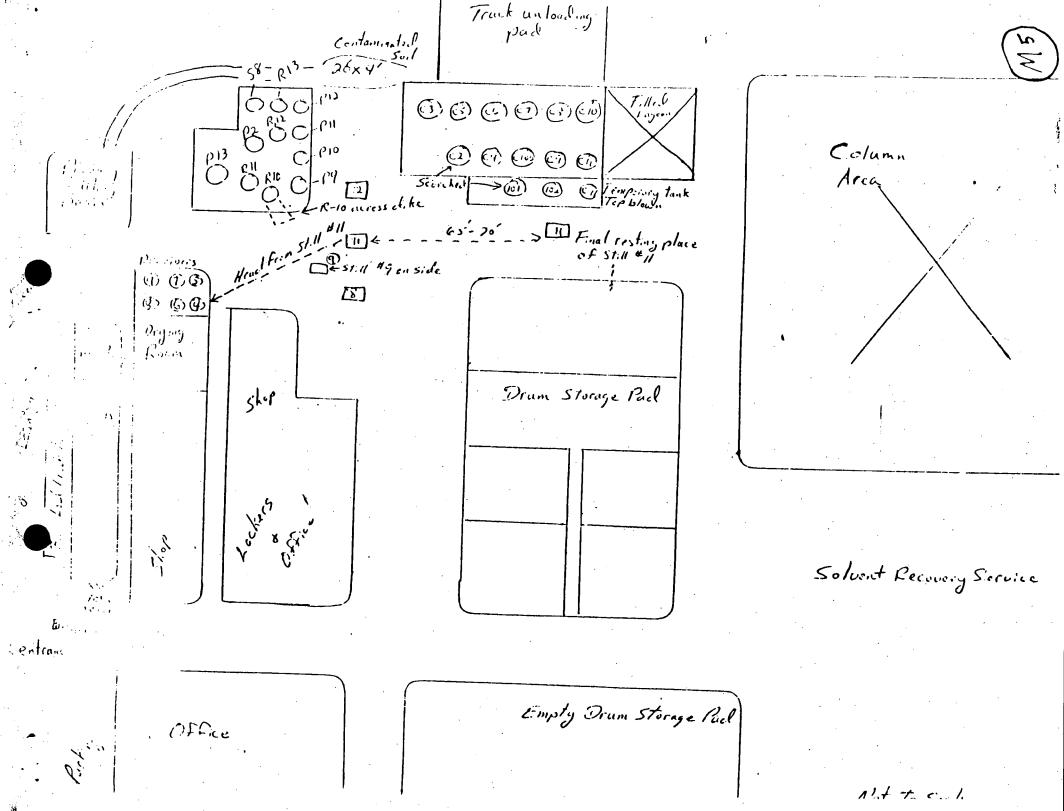
Results:

- 1. Water sample from Kings Creek
- 2. Water sample from water off flow from
- 3. Water sample within tank farm
- 4. Water sample from Kings Creek

Volatile Organic Results not in yet.

- 9.2 ppm Petroleum Hydrocarbons
- 16 ppm Petroleum Hydrocarbons
- 40 9ppm Petroleum Hydrocarbons
- 361.8ppm Total Organic Carbon

JD:dg





SOLVENTS RECOVERY SERVICE OF NEW JERSEY. INC.

1200 SYLVAN STREET : LINDEN, N. J. 07036

PHONE: (201) 862-2000

October 5, 1981

Dr. Ralph Pasceri
State of New Jersey
Bureau of Emergency
Response Coordination
120 Route 156
Yardville, NJ 08620

Dear Dr. Pasceri:

This letter serves as official notification of a solvent spill and fire that occurred at Solvents Recovery Services of New Jersey at their Linden plant at approximately 6 o'clock on the evening of october 1. A detailed tabulation of the equipment and tanks involved in the spill and fire, together with their contents, is being prepared and will be submitted on completion.

Samples of the runoff from the plant site during the fire were taken by the Division of Water Resources, both on the plant site and in King's Creek, the body of water to which our surface runoff discharges, and will presumably be available to the Bureau of Hazardous Waste. Samples of air quality were taken by the EPA Emergency Response Team and it has been reported by the Central Jersey Regional Air Pollution Control Authority and the Bureau of Air Quality. If this was in fact the case, I am sure that analyses will also be available to you.

The materials involved in the incident were recovered solvents which would be volatile and clean burning. The result of this has been that site cleanup following the incident is relatively straightforward. Your Mr. Tom Downey has inspected the site on October 2 and on Saturday, october 3. Considerable quantities of standing water in areas of the plant have been discharged, after sampling and testing by the Linden Roselle Sewerage Authority, and a daily report on our cleanup progress will be forwarded to the department.

Sincerely,

James R. Hulm Vice President



ecology and environment, inc.

300 McGAW DRIVE, RARITAN CENTER, 2ND FLOOR, EDISON, NEW JERSEY 08837, TEL. 201-225-9659

International Specialists in the Environmental Sciences

14 October 1981

Mr. Fred N. Rubel, Chief Hazard Response Branch U.S. EPA, Region II Woodbridge Avenue Edison, New Jersey 08837

Subject: Solvent Recovery Fire, Linden, New Jersey, Report of, TDD 2-8110-03.

Dear Mr. Rubel:

In accordance with TDD 2-8110-03, a response was made to a major chemical fire at the Solvent Recovery facility in Linden, New Jersey on 1 October 1981. A report of the fire is as follows:

1. Synopsis:

At about 1900 hours on 1 October 1981, several closely spaced explosions occurred at the Solvent Recovery, Inc. facility at 1200 Sylvan Avenue in Linden, New Jersey. Solvent Recovery, Inc. accepts waste solvents and other materials from industrial sources, and recycles the commercially valuable solvents. Material is stored on site in large vertical tanks and 55-gallon drums. Specific materials known to be stored on site at the time of the fire were methyl ethyl ketone, xylene, benzene, and toluene.

Shortly after the explosions occurred, several additional storage tanks exploded and a large fireball formed over the facility. The shock of the explosion was felt at least 6 miles away from the plant, and the adjacent Linden Airport was closed due to heavy black smoke drifting across the runway.

The Linden Fire Department sounded a general alarm and, supported by nearby fire departments, brought the fire under control at about 2000 hours. Air monitoring was conducted by local, State, and Federal agencies, and only 2 minor injuries were noted as a result of the incident.

Violation:

None.

3. Suspected Violator:

None.

4. Persons Referred To In This Report:

Name	Address	Phone	Relationship To Case		
Richard Dewling	U.S. EPA 26 Federal Plaza New York, NY	212-264-0396	Acting Regional Administrator		

<u>Name</u>	Address	Phone	Relationship To Case
Ken Stoller	U.S. EPA 26 Federal Plaza New York, NY	212-264-2647	Director, Office of Hazardous Waste Response
Fred Rubel	U.S. EPA Woodbridge Avenue Edison, NJ 08837	201-321-6658	Chief, Hazard Re- sponse Branch
Paul Elliot	u u	" " 6670	Chief, Emergency Response Branch
Robert Cobiella	H s H ;	" " 6646	Emergency Response Section
Danny Barney	Ecology & Environment 300 McGaw Drive Edison, NJ 08837	Inc." 225-9656	Investigator
John Bee	H H	11 11 11 11	n
Michael Skirka	11 11	11 11 11 11	n .
David Marlowe	11	11 11 11 11	n
Chief Pellegi	Linden Fire Department Linden, NJ	" 4 86 - 2700	Deputy Fire Chief
Jim Hulm	Solvent Recovery, Inc Linden, NJ	. " 862-2000	Owners' Repre- sentative
Richard Kozub	Central Jersey Region Environmental Health Agency	" 826-3100	Investigator
Jim Ross	NJDEP Trenton, NJ	609-292-5588	Emergency Response Coordinator

5. Findings of Fact:

1 October 1981

1900 hours (approximate) - Explosions were heard at Solvent Recovery and a large fire ball noted. A general alarm call was made by the Linden Fire Department, and the adjacent Linden Airport was closed. U.S. Route #1 was closed for several miles either way of the site to allow for emergency vehicles. Air monitoring was reportedly begun by local and State health agencies. Mr. Richard Kozub of the Central Jersey Region Environmental Health Agency (monitoring agency for NJDEP) reportedly stated taht the chemicals were "not what we would classify as toxic materials. They don't represent that sort of danger to the area." (Taken from Star Ledger, 2 October 1981)

- 1920 hours - Fred Rusel, Chief, Hazard Response Brand. of U.S. EPA, responded to radio reports of the incident by notifying Dr. Dewling and Ken Stoller of EPA Region II Headquarters, and by turning out the Region II Emergency Response Team.

2015 hours - Danny Barney received pager notice of fire and turned out three additional members of the Technical Assistance Team (TAT).

2030 hours - Emergency Response personnel met at Regional Response Center. Additional national TAT and EPA personnel responded as well. Three teams were organized, Paul Elliot manned the base radio station, Dr. Dewling, Ken Stoller, and Fred Rubel departed enroute the scene via helicopter. Three teams departed via response vehicles, meeting up with NJDEP personnel enroute.

2100 hours - EPA and TAT personnel on scene. Fire was under control, however large amounts of fumes and smoke were still present. A site radio station was set up and a team of three entered the fire zone. Danny Barney and John Bee conducted air monitoring with an HNU and detector tubes while being accompanied by Deputy Chief Pellegi of the Linden Fire Department. No fire or other emergency personnel besides EPA and TAT wore any type of respiratory protection, based largely on statements by Jum Hulm (owners' representative) that none of the materials on site were toxic. Drums of methyl ethyl ketone, xylene, benzene, and toluene were seen by TAT members. HNU and detector tube readings showed approximately 50 ppm of toluene and other solvents near the fire zone. Higher concentrations were detected by odor, however, measurements were hindered by a heavy down pour and streams of fire water.

2200 hours - Deputy Chief Pellegi stated that no further danger of explosion or reflash remained, and Paul Elliot secured the response. NJDEP personnel were notified of TAT sampling results, and confirmed that the State sample results agreed quite closely with those obtained by TAT. John Bee and Robert Cobiella conducted air monitoring on Staten Island on the return trip with negative results. Immediately prior to departure, Danny Barney noted that virtually all contaminated fire water was running into the storm sewer system. Local fire officials did not consider the matter significant.

Conclusions:

A proper and timely response was made by EPA, based upon the very delayed notification received. Some actions and statements made by local and state personnel were questionable as they indicated that a number of designated hazardous substances were not toxic or hazardous. No respiratory protection was worn with the exception of EPA and TAT (SCBA) and NJDEP (half-face canister).

Respectfully,

Janny L. Barney
Technical Assistance Team Leader

DLB:1s

TO_Dr.	R. Buchanan			
FROM	Paul B. Dahlgren		DATE	7/24/79
SUBJECT.	Boring locations	for Solvents Recovery Serv	ice (SRS), Linde	en City, Union Co.

At your verbal request, I assisted Ken Friis of Straubing & Rubin, Consulting Engineers with the selection of boring locations for a special waste application for Solvents Recovery Service. I visited the site on July 24, 1979, where I was met by Mr. Friis and Mr. James R. Hulm, General Manager of S.R.S.

The plant has been operating for a number of years, reclaiming solvents for other industries. It is my understanding that the only portion of the operation which will fall under special waste regulations will be confined to three tanks indicated on the attached sketch (I have site plans for the property, which I will hold unless you have use for them). Even if only a small portion of the total operation will be covered by the new regulations, we must consider the entire operation in order to evaluate the groundwater contamination potential. In particular, there are five aspects of the operation which deserve consideration:

- Along the northern portion of the property, in the area now used as a roadway for tank trucks, still bottom material was spread on the land to dry, according to Mr. Hulm. He indicated that the practice ended 10 years ago. However, he also indicated that during recent construction work, as certain areas were excavated, a strong solvent odor was encountered.
- The area labelled waste water basin on the sketch is a concrete basin which accepts runoff, spillage, etc. from the process area. Precipitation is induced by treating with calcium chloride, prior to discharging the water to a surface ditch via a storm drain. According to Mr. Hulm, SRS has an N.P.D.E.S. permit for the discharge. the company plans to eliminate that discharge within the next year or tow by connecting the waste water basin to an existing sanitary sewer. There is likely to be ground water contamination from the present operation due to percolation of a concentrated brine through any leaks in the basin or sewer, and from the area of the ditch.
- (3) S.R.S. has a second N.P.D.E.S. permit for discharge from an area of ponded water along the east side of the site. Mr. Hulm informed me that this area is also to be joined to the sanitary sewer in the near future.
- (4) There is an unlined lagoon on the site, which is used for collection and evaporation of runoff and spillage from one of the process areas. When I asked Mr. Hulm what was in the "water" in this lagoon, he said that it probably contained materials such as toluene, isopropyl alcohol, etc. Mr. Hulm stated that there is little or no seepage from the pit, based on the length of time "water" stands in it, and based on the assumption that material which has settled out may have formed a crude seal. This could possibly be true, although a liner would certainly be a good idea.
- (5) The area along the southern border of the site marked "drum storage" on the sketch contains many rusted and dented drums. According

CONFIDENTIAL

Attachment



to Mr. Hulm, they at the least for the majority, emerged which have not been returned to their owners. The drums are stacked on concrete pads, but there is no dike around the pad. Therefore, if there are any leakers in the pile, the leakage would run off onto surrounding soil.

The impression I received by talking with Mr. Hulm is that the company is aware that some of their old procedures are not as environmentally sound as they should be, and that the company intends to up-grade the facility. I expect we will find the company cooperative.

The site is located on unconsolidated deposits of glacial origin. According to a bedrock contour map for Union County, the deposits are approximately 30 feet thick. The glacial deposits, which are composed primarily of silt, clay and fine sand, are underlain by the Brunswick Shale of Triassic Age. The Brunswick is an important aquifer, utilized in this area primarily for industrial wells. I suspect that ground water movement is in a southerly direction. I located three boring locations shown on the sketch, and recommended that the borings by completed as observation wells. I made it clear to Mr. Hulm that the completion of the wells was not required at this time, but that wells almost certainly would be needed eventually. He indicated that the company would install the wells.

Paul B. Dahlgren

cc: B. Patel

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Facility Name:	Solvent Recovery Service	Date:12/16/80Time: 11:00	
Facility Type:	Transfer, storage, repro		
Street:	Sylvan	Lot: 21, 26, 24, 29 Block: 580	
To:m:	Linden	Phone: 862-2000	
County:	Union	Person Contacted: Ron Fisher Pesition: Plant Supervisor	
. Inspector:	Dante	103222011	
Weather Conditi	ens: Clear $\overline{//}$ Rain $\overline{/X}$	/ Snow ///	
Mind Direction:	W Temp: 37	Speed <u>5-10 MPH</u>	
Security Measur	es: Fence /X/ Yes ///	No	
	Guard $\overline{//}$ Yes $\overline{/X/}$	No	
	Other <u>Supervisor at</u>	plant 24 hrs. a day, 7 days a week.	-
Safety Features	:		
Firefightlag	$\sqrt{X/}$ Yes $\sqrt{/}$ No		
Type:			
	her $\sqrt{\chi}$ Guns $\sqrt{1}$ Other		
Protectiv (Issued	e Clothing: $\sqrt{\chi^{-/}}$ Yes $\sqrt{\frac{1}{2}}$ to Employees)	_/ No	
Written E	mergency Procedures Poster	d <u>/x</u> / Yes <u>/</u> / No	
Inspection Obse			
Odors: On S	ite /X/ Yes /// No	Off Site // Yes // No	
	al odors from processing		
Leaks, Spill	s: On Site $\frac{\sqrt{1}}{2}$ Yes $\frac{\sqrt{2}}{2}$	\overline{X} No Off Site $\overline{/}$ Yes $\overline{/}\overline{X}$ No	
Source:			
Overall House	cheeping: Poor /// Fair	r // Good / X/ Encellent //	
Drum Storage:			
letal ::o. <u>160</u>	07 Size55	gal. Type steel	
acc	cording to Ron Fi her		
Stacked Height:	// 1 Drum // 2 D:	rums \sqrt{X} 3 Drums $\sqrt{1}$ 4 or more	
P-11	7 van /Y/ va On concre	ate nad	



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amples Gathered: // yes /X/ no Number
hotos: // Yes /X/ No No
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2.
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5
do not have handling me
Observations and/or Other Comments 1. New manifests appear to be in good shape. Most disposer copies do not have handling me written out. I informed Mr. Fisher to list the handling method. 2. SRS is in the porcess of shipping out eighty drums to Enviro Chem. Mr. Fisher stated to the state of the state
2. SRS is trying to cut down their drum supply for the natural states. The works drums within the last two weeks. drums within the process of vacing out waste fuel blend drums into a vac truck. The works drums within the process of vacing out waste fuel blend drums into a vac truck. The works drums within the process of vacing out waste fuel blend drums into a vac truck. The works drums within the process of vacing out waste fuel blend drums into a vac truck. The works drums within the process of vacing out waste fuel blend drums into a vac truck. The works drums within the last two weeks. 3. Worker in the process of vacing out waste fuel blend drums into a vac truck. The works drums within the last two weeks. When the process of vacing out waste fuel blend drums into a vac truck. The works drums within the last two weeks. 3. Worker in the process of vacing out waste fuel blend drums into a vac truck. The works drums within the last two weeks. When the process of vacing out waste fuel blend drums into a vac truck. The works drums within the process of vacing out waste fuel blend drums into a vac truck. The works drums within the process of vacing out waste fuel blend drums into a vac truck. The works drums within the process of vacing out waste fuel blend drums into a vac truck. The works drums within the process of vacing out waste fuel blend drums into a vac truck. The works drums within the process of vacing out waste fuel blend drums into a vac truck.
3. Worker in the process of vacing out waste ide. 3. Worker in the process of vacing out waste ide. 3. Worker in the process of vacing out waste ide. 4. Observed some reddish standing water in the back of the drum storage area. Mr. Fisher observed some reddish standing water in the back of the drum storage area. Mr. Fisher replaced the lid during my inspection.

The red paint pigment noticed in last weeks report has been cleaned up. The lagoon is frozen and the ice has a reddish color. The lagoon is filled to about Facility Operator's Signature 25-30% frozen water.

One drum of waste with the lid off. Mr. Fisher replaced the lid during my inspection.

inspector's Signature

said it will be cleaned up.

Observations and/or Other Comments

Visting and St. Other Commence
8. Noticed the greer dye in trenches adjacent to drum storage area. The liquid in the
trenches is semi frozen.
9. Hoses placed on bare earth, noted in last weeks report, have been moved.
10. A steam line broke on 12/15/80 and SRS is now in the process of repairing it.
11. The primary settling pit has absorbant pads placed in it to catch any solvent that
may be in the run off liquid.
12. I recommend concrete be placed in the trenchs adjacent to the drum storage area.
13. SRS in in compliance with condition 12 (Record and Inspections), condition 26 (Tand
identification) and condition 16 (Fire fighting and Inspections) of their TOA.
•
•

Inspector's Signature

Facility Operator's Signature

NEW JERSEY STATE DEPARTMENT OF ENVIRONMENTAL PROTECTION

MEMO

TO	Kevin Gashlin						
FROM	Thomas Downey			DATE	March	30,	1981
	Solvent Recovery	Service -	Lagoon,	Confidential			
PORTECI	Joine Heart						

On March 13, 1981 during a weekly inspection at SRS, Ron Fisher, Plant Superintendant and myself discussed the recent "excavation" and back filling of the lagoon adjacent to the crude tank farm. Mr. Fisher stated that he was not aware of the fact that the lagoon was to be filled in until after it had already been done. He (Fisher) was elsewhere in the plant at that time. According to Mr. Fisher the word to fill in the lagoon came directly from the president of the company. When Bob Dante and myself took soil samples from the lagoon, Mr. Fisher was very helpful in pointing out areas in which to dig to locate what appeared to be contaminated soil. It was Mr. Fisher's opinion that the company did not handle the excavation of the lagoon properly. Mr. Fisher further stated that all of the above mentioned would be denied if he was ever confronted with having said such.

Later that day, I spoke with Joe Rossi, Company Engineer, concerning the lagoon. Mr. Rossi again told me that before the lagoon was dug out, water was pumped from the lagoon into a holding tank and later discharged the sewer. A crusty later of material was found on the bottom of the layer, about 1-2 inches thick. Mr. Rossi said this layer plus another inch or two was scraped out and placed in a BFI roll off. Supposedly, 32 cubic yards of material was removed from the remainder of crude tank farm and lagoon floor. The sides of the lagoon were then pushed in and clean fill was placed on top. A six inch layer of sand was spread over this.

I have serious doubts if any material at all was scraped from the bottom of the lagoon. Walking on the surface of the fill material is like walking on a sponge. In some areas surface is very soggy and one could easily sink to the knees.

Using the sides of the lagoon as fill was not a good idea. There were sections of the lagoon wall, especially the Southwest end that were very spongy from accumulated spills.

I feel that if samples indicate the presence of contaminated soil that SRS should be required to excavate the entire area again to the satisfaction of a DEP engineer or geologist (who should be present) and dispose of all excavated material that are hazardous.

See before and after photos, attached.

Thomas Downey

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NEW JERSEY STATE DEPARTMEN

MEMO

ENVIRONMENTAL PROTECTION

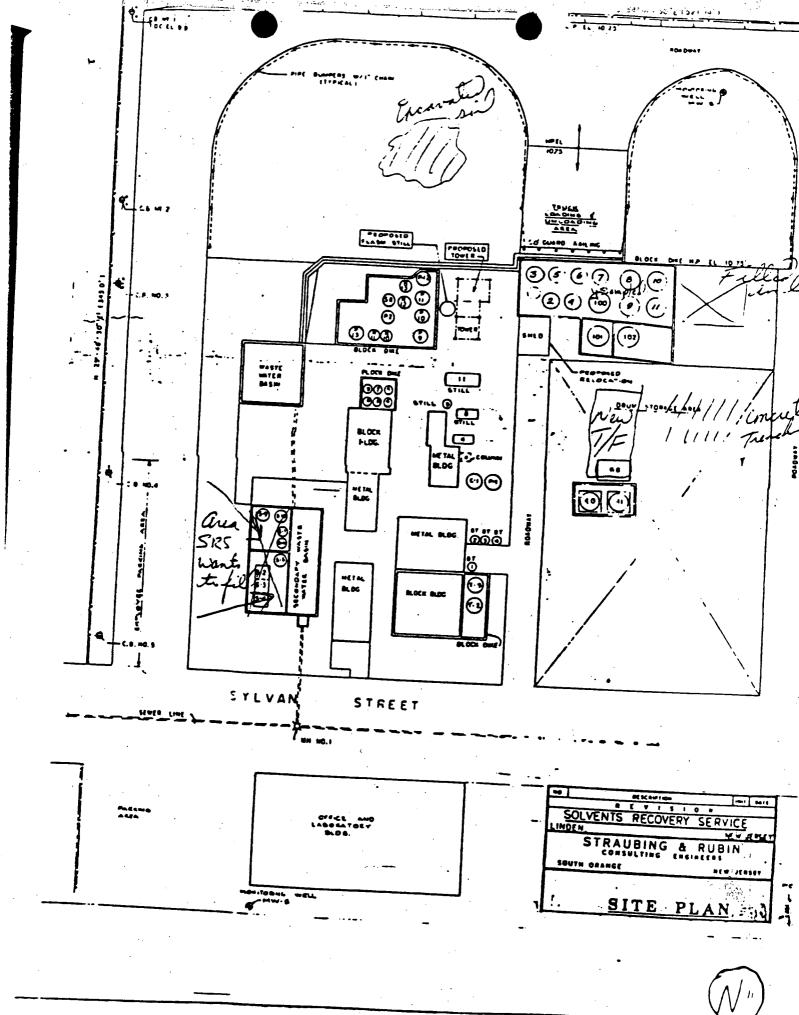
то	Ronald T. Corcory	
FROM	Kevin Gashlin	DATE
SUBJECT	Summary of activity at SI	RS lagoon post incident occurring 3/13/82
DATE	INSPECTOR(S)	REPORT EXCERPT
3/13/81	Dante/Downey	The lagoon has been backfilled and is very
		spongy. We took 2 samples and also a sample was taken for SRS. Samples were taken in the middle west area, 1 split numbered TD005 A and B. The sample was taken about 16" to 20" in depth. The soil had a greenish and reddish
		color. The soil also had a solvent odor. The second set of samples were taken from the northeast region of the lagoon. The samples were labeled TD006 A and B and again a sample was taken for SRS. This sample was taken at a depth of 6" to 12". This area also had reddish and greenish soil and also appeared to have a
		solvent odor. Pictures were also taken of this area. I recommend that this area be dug out again if the sample show chemical traces. I also recommend that an inspector be present when SRS backfills the lagoon for a second time.
3/20/81	Dante	The status of the lagoon has not changed since last inspection.
3/25/81	Dante	No work has been done on the lagoon since my last inspection. SRS is waiting to get the results of the samples taken on 3/13/81 before they make a determination on whether or not they should dig up the lagoon.
4/6/81	Downey/Dante	Filled in lagoon remains the same as last inspec- tion. No work has been done
4/24/81	Downey	Filled in lagoon remains the same as reported on 4/6/81.
4/30/81	Dante/Dawson	There has been no change in the lagoon since last inspection report.
5/5/81	Downey/Czachor	Lagoon remains the same. I informed Ron Fisher thatsample results indicate the material is hazardous.
5/18/81	Dawson	Ron Fisher was given a copy of the lab analysis. He made his own copy. There was no change in the character of the lagoon.



5 (0)		
5/29/81	Downey/Czacho	or We noted that nothing i
6/3/81	Dawson	We noted that nothing has been done with
6/11/81		There has been no change in the lagoon.
6/16/81	Dawson/Dante	There has been no change in the lagoon.
6/22/81	Dawson/Dante	There has been no change in the lagoon.
7/1/81	Dawson	There has been no change in the lagoon.
7/7/81	Czachor	No change in the lagoon noted.
7/15/81	Downey	No change noted in ;
	Downey	No change noted in lagoon area.
7/29/81	Downey	и и
8/4/81	Downey	" " H H
8/11/81	Downey	" " " "
8/18/81	Dante	Filled in lagoon remains the same as reported in last week's inspection with the exception of a spot of black oily looking liquid (l' x l') which appears to have bubbled up from the oil. Statusremains the same as noted last week. The black tar-like substance in the western end is about it appears to have perked in the same as about it.
8/31/81	Downey	is about 1' x 1'.
		Black oily substance which was noted in previous inspection as oozing from lagoon area has been dug out. An area 10' x 15' of lagoon surface was disrupted. According to Ron Fisher, workers dug down to a depth of 3' and removed 4, 55 gallon drums of material. Two had been manifested that the drums remained on site. I requested concludes its beautiful our afficient.
9/8/81	Downey	nandling of the filled in land
9/16/81	Downey	No change in lagoon.
9/28/81	"	" " "
10/15/81		19 19 19 19 19
L0/23/81		" " " "
0/28/81	H.	11 11 11
•		11 19 19 21
1/18/81	n	" " " " " " " " " " " " " " " " " " "
		" " " " " " " " " " " " " " " " " " "

11/25/81	•	No mention of lagoon.
12/3/81	· ·	No change noted in filled in lagoon.
12/23/81	Downey	No change noted in filled in lagoon
1/18/82	Downey	
1/26/82	u .	11 H H H H H
2/3/82		11 11 11 11 11 11
2/8/82	Dawson	
3/1/82	Downey	H H H H H

cc: Ed Londres Tom Downey





State of Few Jersey

DEPARTMENT OF ENVIRONMENTAL PROTECTION DIVISION OF ENVIRONMENTAL QUALITY JOHN FITCH PLAZA, CNG27, TRENTON, N.J. 08625

IN THE MATTER OF SCLVENTS RECOVERY SERVICE OF New Jersey, Inc. ADMINISTRATIVE CONSENT ORDER

The following Administrative Consent Order is issued pursuant to the authority vested in the Commissioner of the New Jersey Department of Environmental Protection (hereinafter, "the Department") and duly delegated to the Deputy Director, Division of Waste Management, pursuant to the Solid Waste Management Act, N.J.S.A. 13:1E-1 et seq. and the rules and regulations promulgated pursuant thereto.

FINDINGS

Operating Authorization to Solvents Recovery Service of New Jersey, Inc.
as a hazardous waste facility, No. 2009C (hereinafter, "the Company")
authorizing said company to conduct hazardous waste storage, treatment
and disposal operations at 1200 Sylvan Street, Linden, New Jersey.
Subsequently, this Temporary Operating Authorization was extended on
December 30, 1980 for a period through December 31, 1981.

On July 20, 1981, two Notices of Prosecution were issued to the Company by the Department for violations of N.J.A.C. 7:26-2.2.2, 7:26-2.2.3, and 7:26-2.2(d). Settlement offers of \$20,000 (7:26-2.2.2 and 2.2.3) and \$5,000 (7:26-2.2(d)) were made by the Department to the Company for these violations. In addition, the Company was ordered to remove all contaminated soil within thirty (30) days from the Company's earthern bermed area approximately 56' x 48' located adjacent to the Company's tank farm.

- 3. On October 1, 1981, a major explosion occurred on the Company's premises in the flash distillation recovery area. The explosion was caused by an uncontrolled exothermic reaction in still No. 11 processing waste acetone. The explosion and resulting fire caused extensive damage to the flash distillation portion of the facility.
- 4. On October 28, 1981, representatives of the Company conferred with members of the Department to discuss continued operation of the SRS facility, the reconstruction of fire affected portions of the flash distallation area (8 storage tanks, 2 stills) and facility compliance with New Jersey Kazardous Waste regulations.
- 5. On October 30, 1981, Mr. James R. Hulm, Vice President of Solvents Recovery

 Service forwarded a letter to Mr. Frank Coolick, Department of Environmental

 Protection summarizing the discussions of the October 26, 1981 conference.

On November 12, 1981, the Department issued an Administrative Order to the Company to cease all production operations in all distillation and recovery process areas of the facility, until such time as the Department has reviewed the cause(s), response to and consequences of this incident of October 1, 1981 and until the Department authorizes a recommencement of such operations by the Company.

On November 17, 1961, the Company submitted to the Department a report entitled Thermal Reaction of a Solvent Recovery Mixture prepared by Hazards Research Corporation of Rockaway, New Jersey detailing the nature of this October 1, 1981 incident as well as a report prepared by James R. Hulm, Vice President, Solvents Recovery Service of New Jersey, Inc., detailing the cause, response, and consequences of the incident.

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- On December 9, 1981, representatives of the Company conferred with members of the Department to discuss the terms of this Administrative Consent Order to supercede the prior Administrative Order and to authorize the Company to resume operation of a portion of the solvent flash distillation recovery area on an interim basis.
- 9. On December 9, 1981, the Company submitted engineering and design plans for eight (8) existing storage tanks, one (1) fire damaged still, one replacement still not fire damaged, pad and diked area that are to be used on an interim basis for solvent flash distillation recovery.

reducing the fire at the facility, the Company and the Department have set a long-standing disagreement regarding the scope of the Department's regulations insofar as they should or do apply generally to "recycling" as "treatment" and specifically to the Company's custom fractionation distillation operations. By this Consent Order, the Company submits to the jurisdiction and regulations of the Department of all phases of its operations under the terms and conditions described herein.

- II. On May 12, 1982, members of the Department conducted soil borings in the area specified hereinabove in Paragraph 2. Mr. Randall Mills, a geologist employed by Wehran Engineering observed the soil borings and was given a split of all samples. The borings were performed because of the Company's contention that all contaminated soil had been removed from this area.
- 12. On May 21, 1982, the Department received the analysis of the soil borings described herein above in Paragraph 11. The analysis indicated the presence of hazardous materials.

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- 13. On May 25, 1982, the Company did remove all contaminated soil as specified herein above in Paragraph 2 based on the results of the analysis specified herein above in Paragraph 12.
- 14. Based upon an undated letter from Mr. Jerome A. Frederick, Executive
 Director, The Linden Roselle Sewerage Authority, to Mr. Edward J. Londres,

DATED UNE 30 1982

Lino F. Pereira, Deputy Director Division of Waste Management

EXECUTERY SERVICE

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State of New Jersey

DEPARTMENT OF ENVIRONMENTAL PROTECTION

DIVISION OF HAZARDOUS WASTE MANAGEMENT

Michele M. Putnam Deputy Director

Hazardous Waste Operations

John J. Trela, Ph.D., Director 401 East State St. CN 028 Trenton, N.J. 08625 (609)633-1408

Lance R. Miller Deputy Director

Responsible Party Remedial Action

MEMORANDUM

TO:

Solvents Recovery Service File

FROM:

David Van Eck. HSMS IV

Bureau of Planning and Assessment

SUBJECT:

HISTORY OF PROPERTY OWNERSHIP

On June 20, 1988, the writer spoke with the Linden City Tax Assessor regarding the history of property ownership of Block 580 Lots 21, 22, 23, 26, 27, 28 and 29, currently occupied by Solvents Recovery Service. The following information was obtained:

LOT	DATE	OWNER
Lot 21	1962-present 1938-1962 1938 1938 1938 1937	Carleton H. and Carl R. Boll United New Jersey Railroad and Canal Co. Mary T. McCarthy Industrial Properties Corp. Seymour Isaacson Esmeralda P. Feltz
Lot 22	1964-present 1962-1964 ? - 1962 no previous records available	Carleton H. and Carl R. Boll United New Jersey Railroad and Canal Co. Humble Oil & Refining Co.
Lot 23	1960-present 1940-1960 1939-1940 1938-1939 no previous records available	Solvents Recovery Service Industrial Property Corp. Frank Bassillo Mary T. McCarthy et. al.
Lot 24	1966-present 1962-1966 1946-1962 1941-1946 1941	Solvents Recovery Service Everett Canter Joseph Sorrentino Helen Wagner Industrial Properties Corp.

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	? - 1941 no previous records available	Frank Bassillo
Lot 26	1965-present 1962-1965 1951-1962 1949-1951 1941-1949 1937-1941 1937	Carleton H. and Carl R. Boll Lawrence Germaine Co. Garden State Motor Lodge, Inc. Lawrence Germaine Co. Helen Wagner Industrial Properties Corp. Mabel Maul Augustus J. Brunson
Lot 27	1940-present ? - 1940 no previous records available	Solvents Recovery Service Industrial Properties Corp.
Lot 28	1966-present ? - 1966 no previous records available	Carleton H. and Carl R. Boll Everett Canter
Lot 29	1966-present 1965-1966 1963-1965 1945-1963 1912-1925 ? - 1912 no previous records available	Solvents Recovery Service Everett Canter Lawrence Germaine Co. Garden State Motor Lodge Inc. McIntyre Realty Co. Abbott McIntyre, et. al.

No information was available stating whether or not the previous realty owners had any operations on the property. SRS claims to have had operations on site since 1944.

DVE:mz